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THE QUANTITY THEORY AND PRICE STABILIZATION

I

The quantity theory of money, Dr. Anderson writes, "is the basis of the whole project of stabilization of prices by central bank action."[1] If it can be established, then, that the quantity theory is erroneous, the rationale upon which the new theory of central bank functions rests will be removed, with price stabilization exhibited to all the world as "chiropractic economics."[2] This, Dr. Anderson, by dint of his inveterate convictions on the theory of money, is well prepared to do. His *Value of Money* is in large part a critique of the quantity theory, and is one of the most important documents in the polemics of that subject. And there are other, more fugitive writings, uniformly critical of the quantity theory, that have come from his pen.[3] We are prepared, then, for an attempt at demolition of this doctrine. But Dr. Anderson's argument in the present instance does not rest upon his familiar categories: value as a product of social psychology, the absolute value of goods and money, the intrinsic value of money, the psychological determinants of the value of money, etc. On the contrary, he approaches the quantity theory—that "creature of the myth-maker," as Veblen once called it —with the armament of quantity theorists, and attempts to confute his adversaries with their very thunder. "For the purpose at hand," Dr. Anderson declares, "I am following the procedure of the quantity theorists." The "past nine or ten years" have provided "a classical test of the quantity theory of money," and the "ten year test ends in a tragedy," for "the beautiful theory is crushed by the weight of facts."[4] It is doubt-

[1] "Commodity Price Stabilization a False Goal of Central Bank Policy," *Chase Economic Bulletin*, vol. IX, no. 3, p. 9.

[2] "The Gold Standard Versus 'A Managed Currency'," *Chase Economic Bulletin*, vol. V, no. 1, pp. 6-9.

[3] "Value and Price Theory in Relation to Price-Fixing and War Finance," *American Economic Review Supplement*, March, 1918, pp. 254-256; "Artificial Stabilization of Exchange Condemned," *Chase Economic Bulletin*, vol. II, no. 1, pp. 26-33; "Cheap Money, Gold, and Federal Reserve Bank Policy," *Chase Economic Bulletin*, vol. IV, no. 3, pp. 11-13; "The Gold Standard Versus 'A Managed Currency,' " *op. cit.*; "Stabilizing the Franc," *Chase Economic Bulletin*, vol. VI, no. 2, pp. 25-26.

[4] "Commodity Price Stabilization," *op. cit.*, pp. 9, 12.

ful whether most economists agree with Mr. Hawtrey that "scientific treatment of the subject of currency is impossible without some form of the quantity theory."[5] But it is true none the less that they cling to one or another version of this doctrine. Economists are harboring a delusion that must be exorcised speedily, if Dr. Anderson's assertion that "prices would have to be eighty-three per cent higher than they are, if the quantity theory of money were true!"[6] is valid.

Dr. Anderson writes of the quantity theory as if it were a crystalline unitary deliverance. "The theory holds," he avers, "that, allowing for changes in volume of trade, the average of commodity prices will go up or down in precise proportion to the quantity of money and bank deposits," and he adds parenthetically, "I do not forget here 'velocity of circulation' of money and deposits, which the quantity theorists also bring into the picture!"[7] This representation of the quantity theory is fair enough as a summary statement of the position of Professor Fisher, and perhaps, of Professor Kemmerer. It is indubitably an unsatisfactory rendering of the conceptions of Marshall, Taussig, Hawtrey, Cassel, or Keynes—yet, these writers are generally thought of as quantity theorists. The quantity theory cannot be taken as a set of unique propositions, though, curiously enough, one finds even exponents of this doctrine asserting that *the* theory is "often misstated and misrepresented."[8] The fact is, of course, that many diverse formulations appear under the generic title of the quantity theory. However, this criticism of Dr. Anderson is all too formalistic. Though Dr. Anderson expatiates critically upon *the* quantity theory, he confines himself, in effect, to the Fisher type of approach. An appraisal of Dr. Anderson's "test" of the quantity theory, achieved by the "usual methods of the quantity theorists,"[9] resolves itself, therefore, into an examination of Dr. Anderson's technique in the light of the Fisher prototype. Only if Professor Fisher's methods, when employed judiciously, lead to appreciable error, will it be necessary to examine the further question whether the proposal for stabilization of prices through central bank action rests exclusively on Professor Fisher's formulation of the quantity theory; and, if not, whether other variants of this general doctrine, upon which a scheme of central bank regulation of general prices may conceptually be bottomed equally well, are also "crushed by the weight of facts."

[5] *Currency and Credit* (2nd ed.), p. vi.

[6] "Commodity Price Stabilization," *op cit.*, p. 12.

[7] *Ibid.*, pp. 9-10.

[8] J. M. Keynes, *Monetary Reform*, p. 81. *Cf.*, I. Fisher, *The Purchasing Power of Money* (rev. ed.), p. 14, and F. W. Taussig, *Principles of Economics* (2nd ed.), vol. I, p. 237.

[9] "Commodity Price Stabilization," *op. cit.*, p. 12.

II

Dr. Anderson establishes indexes of the magnitude of the individual factors in the equation MV + M′V′ = PT for the period 1919-1928. The "hypothetical" P, as determined from the equation, is then compared with the Bureau of Labor Statistics index of wholesale prices, the "actual" P. Dr. Anderson's results are reproduced in Table I. The agreement in the initial year is a fiction that grows out of the use of indexes rather than actual measurements, and the choice of that year as a base. The discrepancy, on the whole, is considerable, reaching eighty-three per cent in 1928. Dr. Anderson is certainly right when he says that these results are "fantastic."[10] One might, of course, express dissatisfaction with Dr. Anderson's determination of the indexes of the terms on the "money side" of the equation, and with his method of combining these disparate indexes into a composite index; and of this, we shall have something to say at a later point. But the really serious flaw, from an analytic and *dogmengeschichtlich* standpoint, in Dr. Anderson's statistical procedure, consists in the use of a wholesale price composite as an index of P, and an "arithmetic means of a production index and a transportation index" as an index of T,[11] though the former probably accounts for a much larger error than the latter. In using indexes of this complexion, Dr. Anderson has departed widely from the methods of Professors Fisher and Kemmerer. The "fantastic results" that Dr. Anderson obtains, as we shall presently see, follow from his failure, despite his avowed intention, to observe strictly "the procedure of the quantity theorists."[12]

TABLE I

ANDERSON'S CALCULATIONS[13]

Year	Actual P (Index of wholesale prices)	Hypothetical P $\left(\frac{MV+M'V'}{T}\right)$	Per cent by which Hypothetical P exceeds (+) or is exceeded by (−) Actual P
1919	100.0	100.0	—
1920	111.8	104.7	− 5.9
1921	70.4	97.9	+39.1
1922	69.7	96.4	+38.3
1923	72.5	85.8	+18.3
1924	70.7	104.8	+48.2
1925	74.6	112.7	+51.1
1926	72.1	111.3	+54.4
1927	68.8	117.8	+71.2
1928	70.4	128.5	+82.5

[10] *Ibid.*, p. 24.

[11] *Ibid.*, p. 23.

[12] *Idem.*

In determining the numeric values of P and T, Professor Fisher attempted to establish indexes of the *general* price level and *general* trade—he aimed, that is, to make his indexes inclusive of the totality of goods and services that pass in exchange. This procedure followed inevitably from the concept of "societary circulation" that Simon Newcomb had explicated, and which Professor Fisher took over into his work. Newcomb had introduced the concept as an aid in the exposition of the theory of exchange, and used the term "societary circulation" to cover "two opposite circulations," the flow of money payments and the counterflow of commodities and services.[14] Starting with this analytic foundation, Professor Fisher utilized—though often with more ingenuity than exactitude—whatever statistical materials he could command. His index of P is a weighted arithmetic mean of indexes of wholesale prices, wages, and stock prices, the weights employed being thirty, one, and three, respectively.[15] The index of T is based on quantity data for forty-four articles of internal commerce, forty-eight items of foreign trade, sales of stocks, railroad freight, and first-class mail carried.[16] Professor Kemmerer, in an earlier study, also attempted to compute indexes of *general* prices and trade. His index of the "growth of business" is a simple arithmetic mean of fifteen series, and embraces such varied items as population, exports and imports, value of sales on the New York Stock Exchange, consumption of pig iron, etc.[17] His index of *general* prices is similar to that of Professor Fisher, who used it, in fact, as a model for his own.[18] These indexes—especially Professor Kemmerer's T—are admittedly crude.[19] Mr. J. M. Keynes, an otherwise genial critic, has characterized Professor Fisher's estimates of P and T as "unscientific guesses of the wildest character."[20] The weighting systems employed are especially defective. Dr. Anderson has argued ably in his *Value of Money* that speculative activities are underweighted in Professor Fisher's indexes.[21] Mr. Keynes has expressed a similar opinion,[22] and Professor

[14] *Principles of Political Economy*, pp. 326-328.

[15] *The Purchasing Power of Money*, pp. 486-488. See also *Yale Review*, May, 1902, p. 111.

[16] *Ibid.*, pp. 478-486.

[17] *Money and Credit Instruments in Their Relation to General Prices*, part II, chapter VI.

[18] *Ibid.*, chapter VII; I. Fisher, *The Purchasing Power of Money*, p. 487.

[19] *Cf.* W. M. Persons, "The Quantity Theory as Tested by Kemmerer," *Quarterly Journal of Economics*, 1908; I. Fisher, *The Purchasing Power of Money*, pp. 430-432; B. M. Anderson, Jr., *The Value of Money*, chapter XIX; W. C. Mitchell, *Business Cycles* (University of California Memoirs, vol. III), part II, chapter VI; J. M. Keynes, "Fisher's Purchasing Power of Money," *Economic Journal*, 1911.

[20] *Ibid.*, p. 397.

[21] Chapter XIII.

[22] "Fisher's Purchasing Power of Money," *op. cit.*, p. 397.

Fisher has, in part, concurred in these criticisms.[23] Professor Fisher, in one connection, spoke of the weights he used as "merely matters of opinion," though he rationalized his procedure by the comforting thought that "wide differences in systems of weighting make only slight differences in the final averages,"[24] only to wring from Mr. Keynes the rebuke that Edgeworth's theorem on weighting "had often been misapprehended, but seldom to the extent of applying it to a case where *three* quantities only are the subject of weighting."[25] But despite the want of a uniform pattern in the construction of the price and trade indexes (and this is their most serious defect) and with all their technical shortcomings, the statistical labors of Professors Fisher and Kemmerer still constitute serious attempts to measure trading transactions *in general.*

Dr. Anderson is cognizant of Professor Fisher's inclusion of stock sales in his index of trade. Thus he writes: "Professor Fisher includes sales of securities with his physical indicia, but gives them a weighting of only one out of twenty-four, so that practically they do not count. I have not put them in at all."[26] Dr. Anderson does not mention Pro-

Table II
Indexes of Price Movements: 1896-1909[27]

Year	Wholesale prices	Cost of living	Stock prices	Wages	General prices
1896	100	100	100	100	100
1897	100	100	109	100	100
1898	102	103	122	99	100
1899	114	105	166	101	104
1900	124	106	174	100	107
1901	121	111	274	103	108
1902	127	114	325	105	111
1903	127	115	261	107	113
1904	127	117	249	108	114
1905	130	117	325	109	115
1906	138	121	347	113	120
1907	145	126	265	118	125
1908	138	129	261	121	125
1909	142	138	360	122	131

[23] I. Fisher, "A Multi-Billion Dollar Nation," *Annalist,* February 21, 1916, and "Over and Under Counting," *Annalist,* March 13, 1916.

[24] *The Purchasing Power of Money,* p. 485.

[25] "Fisher's Purchasing Power of Money," *op cit.,* p. 397.

[26] "Commodity Price Stabilization," *op. cit.,* p. 23. The weight of securities in Professor Fisher's index is, as a matter of fact, one out of thirty-six. See *The Purchasing Power of Money,* p. 479.

[27] The wholesale price index is that of the Bureau of Labor Statistics; the indexes of cost of living and general prices are Mr. Snyder's; the stock price index is Professor Mitchell's index of forty transportation stocks; the wage index is the Department of Labor index for unskilled labor. The indexes of wholesale prices, cost of living, wages, and general prices were obtained from Snyder, *Business Cycles and Business Measurements,* pp. 286, 288-290. The source for the stock index is Mitchell, *Business Cycles, op. cit.,* p. 175. The base of each index was shifted to 1896.

fessor Fisher's index of general prices, one of the constituents of which is an index of security prices, and presumably Dr. Anderson's comments on Professor Fisher's trade index are intended to cover the price index as well. But Dr. Anderson had previously criticized Professor Fisher for underweighting speculative activities.[28] One might reasonably expect, therefore, that Dr. Anderson in using Professor Fisher's *general method* would improve on the details. Or does Dr. Anderson think that if Professor Fisher's method served well enough for the period 1896-1909, that same technique, employed punctiliously, should—if it is a reliable method—serve equally well for any other period?

There are excellent reasons for believing that the technical defects in Professor Fisher's determination of P for the period 1896-1909 will lead to considerably greater errors, if reproduced for the years 1919-1928. The three components of Professor Fisher's index of the general price level—wholesale prices, wages and stock prices—each showed an advance during this period. The statistics collated in Table II indicate a sufficiently close harmony among the several indexes to justify the employment of an index of wholesale prices as a rough indicator of general price movements. The discrepancy between the index of the

TABLE III
INDEXES OF PRICE MOVEMENTS: 1919-1928[29]

Year	Wholesale prices	Cost of living	Stock prices	Wages	General prices
1919	100	100	100	100	100
1920	111	131	91	119	112
1921	70	97	71	111	94
1922	70	91	89	109	91
1923	73	94	92	118	95
1924	71	95	96	121	96
1925	75	98	122	123	98
1926	72	98	138	126	99
1927	69	95	162	127	99
1928	70	94	213	128	102

[28] *The Value of Money*, ch. XIII.

[29] The indexes of wholesale prices and cost of living are the respective products of the Bureau of Labor Statistics and the National Industrial Conference Board, and were obtained from the *Survey of Current Business*, February, 1928. The indexes of wages and general prices are Mr. Snyder's; the former through 1926 was taken from the *Journal of the American Statistical Association*, June, 1927, p. 229, and for the remaining two years from the *Monthly Review* of the New York Federal Reserve Bank; the latter through 1927 was obtained from the *Review of Economic Statistics*, February, 1928, p. 49, and for 1928 from the *Monthly Review* of the New York Federal Reserve Bank. The index of stocks is a composite of 342 industrial stocks and is given in the *Standard Statistics Bulletin*, March, 1929, pp. 24-25. Where necessary, the monthly figures were converted to an annual basis. The base was shifted in each case. The composition of the index of general prices given in this table is not the same as that of the series in Table II. See C. Snyder, "The Measure of the General Price Level," *op. cit.*, pp. 47, 51.

wholesale prices and Mr. Snyder's index of the general price level is small enough relatively to warrant the conclusion that the domination of Professor Fisher's index of general prices by the index of wholesale prices did not give rise to appreciable error.[30] But one of the most obtrusive differentia of the period 1919-1928 is the disparity in the movements of the large price groups.[31] With the indexes of wholesale prices and cost of living lower in 1928 than in 1919, and the indexes of wages and security prices higher, an index of wholesale prices is not likely to be a satisfactory index of general prices (see Table III). Our familiar commodity indexes, Mr. Snyder wrote in February, 1928, have "never in two generations been less representative," even of the general prices of commodities, "than in these five years or more."[32] The divergence between Mr. Snyder's index of the general price level and the Bureau of Labor Statistics index of wholesale prices is considerable during this period. When Mr. Snyder's index is substituted for the wholesale price series, the hiatus that Dr. Anderson noted between the two members of the equation is reduced in large part. The details of this preliminary revision are recorded in Table IV. The figure for 1919

TABLE IV
PRELIMINARY REVISION

Year	Actual P (Index of general prices)	Anderson's Hypothetical P $\left(\dfrac{MV+M'V'}{T}\right)$	Per cent by which Hypothetical P exceeds (+) or is exceeded by (−) Actual P	Per cent increase (+) or decrease (−) over disparity in Table I
1919	100.0	100.0	—	—
1920	111.6	104.7	− 6.2	+ 5
1921	94.2	97.9	+ 3.9	−90
1922	91.3	96.4	+ 5.6	−85
1923	95.4	85.8	−10.1	−45
1924	96.0	104.8	+ 9.2	−81
1925	98.3	112.7	+14.6	−65
1926	98.8	111.3	+12.7	−77
1927	98.8	117.8	+19.2	−73
1928	101.7	128.5	+26.4	−68

has no meaning, of course; in 1920 the indexes of wholesale and general prices give substantially the same results; but during the next eight years, the disparity between the "hypothetical" and "actual" P is cut on the average by seventy-three per cent when the index of general prices supplants the wholesale price index. Dr. Anderson's largest single error, it appears, consists in the use of an index of wholesale prices for

[30] *Cf.* C. Snyder, "The Measure of the General Price Level," *Review of Economic Statistics*, February, 1928, p. 50.

[31] *Cf.* F. Mills, in *Recent Economic Changes* by the National Bureau of Economic Research, vol. II, pp. 623-634.

[32] "The Measure of the General Price Level," *op. cit.*, p. 50.

purposes of comparison with the "hypothetical" price level yielded by the equation of exchange.

Our evaluation of the numeric correctness of Dr. Anderson's index of T must needs be tentative. It has already been stated that Dr. Anderson does not essay to establish an index of *general* trade, and that his failure to recognize the importance of such an index for the general purpose of determining the statistical magnitude of the terms in the equation of exchange constitutes a serious misapprehension of the work of Professor Fisher, whose methods Dr. Anderson purports to use. An index of trade to be demonstrably satisfactory would have to include "quantities of labor (human services) as well as 'commodities' in the more restricted sense,"[33] stock transactions, freight shipments, dealings in commercial paper, governmental services, and the score of other items that are "trade" correlatives of money payments, and it would have to weight each trade constituent by its respective price in the base period.[34] But we know very little about the magnitude of many trade items; and the difficulties in the measurement of some—*e. g.*, governmental services—are perhaps insuperable. The problem of making an index of trade, as other indexes of business, "stands now much as the price-index problem stood in Jevons' youth."[35] Though the number of physical volume indexes has multiplied rapidly since 1920, we still lack an index of trade that compares even remotely in point of excellence with the Bureau of Labor Statistics index of wholesale prices or Mr. Synder's index of the general price level.[36] Of course, many features of the "progress of trade" during the ten-year interval under consideration are fairly clear: the number of shares transfers increased much more rapidly than industrial production, while freight tonnage increased at approximately the same rate; the development of vertical combinations, the extension of chain store and department store sales, the growth in direct purchases from manufacturers, and the decline of wholesale trade suggest that the rate of turnover of goods from producer to consumer has been reduced;[37] the increase in the number employed in industry has been considerably lower than the growth of production; etc. But such are,

[33] I. Fisher, "The Rôle of Capital in Economic Theory," *Economic Journal*, December, 1897, p. 519.

[34] *Cf.*, W. C. Mitchell, *Business Cycles—The Problem and Its Setting*, pp. 315-320.

[35] *Ibid.*, p. 312. It is of interest to note that while Jevons struck out boldly to construct an index of prices, he complacently used as indicia of the "progress of trade," figures of exports and imports—as was "very commonly done," and statistics of coal output, which he deemed the "best test." See *Money and the Mechanism of Exchange*, p. 310.

[36] It will be recalled that Mr. Snyder's index of trade (75 series) is not an index of the physical volume of trade, as such, but rather of the cyclical-irregular fluctuations thereof. See C. Snyder, "The Index of Volume of Trade: Second Revision," *Journal of the American Statistical Association*, June, 1928.

[37] C. Snyder, "The Measure of the General Price Level," *op. cit.*, p. 44.

at best, only fragments of knowledge. Mr. Snyder believes, indeed, that an index of trade will not differ materially from an index of manufacturing production.[38] On that view, Dr. Anderson's index of T is satisfactory enough, for it corresponds closely to an index of the growth of manufactures. For the present, however, a more agnostic attitude may be the better part of wisdom. If Dr. Anderson's measure is accepted, it is only because it would take vast pains to achieve a more soundly conceived index, and further, because even an index that exhausted the extant materials would still fall short of the desideratum.[39]

The discrepancy between Dr. Anderson's numeric values for the two members of the equation is narrowed but not eliminated when the index of wholesale prices is replaced by Mr. Snyder's index of the general price level. The residual discrepancy can be explained, in large part,[40] by the vulnerable methods employed in the construction of the remaining indexes. To begin with, Dr. Anderson's index of M is based on the series of "money in circulation" at the end of each fiscal year, as reported by the Comptroller of the Currency.[41] But these statistics are unsatisfactory; for, though they exclude "money held in Treasury" and "by Federal Reserve banks and agents," they include money held by state and national banks. The series that is wanted is not "money in circulation," but rather "money in circulation not in banks."[42] A set of excellent estimates of this variable, made by the late Allyn Young, is available through 1926;[43] and it is easy to extend these estimates for 1927 and 1928. Then again, Dr. Anderson's index of M′ was determined on the basis of "total deposits of all reporting commercial banks as of June 30," and the index of V′ was obtained by "dividing total bank clearings of the country plus federal reserve clearings by deposits."[44] But the estimates of M′ and V′ could have been improved by using figures of "individual deposits subject to check" for "all reporting banks" as of June 30, the similar figures for national banks on "call dates," and the series of "debits" to individual accounts in 141 centers.[45] Moreover, for Dr. Anderson's specific problem, it was superfluous to determine M′

[38] *Ibid.*, pp. 43-44.

[39] See *infra*, p. 15.

[40] See *infra*, pp. 15, 19, *et seq.*

[41] "Commodity Price Stabilization," *op. cit.*, p. 23.

[42] *Cf.* E. W. Kemmerer, *op. cit.*, pp. 98-100, and I. Fisher, *The Purchasing Power of Money*, pp. 432-434.

[43] "An Analysis of Bank Statistics for the United States," *Review of Economic Statistics*, July, 1927, pp. 135-136.

[44] "Commodity Price Stabilization," *op. cit.*, p. 23.

[45] Dr. Anderson mentions the possibility of using some of these statistical series. Yet, he chooses not to employ them, for he finds that "the results are essentially the same" (*idem*). But an empirical coincidence seems a very unsatisfactory reason for using materials that dovetail but poorly with *a priori* analysis, when much better materials are to be had.

and V′ separately, and an excellent index of M′V′ could be had merely by converting the estimates of total debits of either Mr. Snyder or Professor Copeland into relative form.[46] Dr. Anderson, it is obvious, did not assemble the very best of the existing materials in his construction of the indexes of M, M′ and V′. Only a word need be added about the establishment of V, and the method employed in combining the several terms in the left member of the equation into a single index. V was taken as a constant throughout the period, and M′V′ and MV were weighted nine and one, respectively.[47] It is probable that V fluctuated to some extent in harmony with V′, that there was a slight secular rise in V, and a considerably steeper secular advance in the ratio of M′V′ to MV during the decennium under consideration.[48] But in the absence of trustworthy data, Dr. Anderson's simple method is perhaps as good as any.

TABLE V
FINAL REVISION

Year	Actual P (Index of general prices)	Hypothetical P $\left(\frac{MV+M'V'}{T}\right)$	Per cent by which Hypothetical P exceeds (+) or is exceeded by (−) Actual P
1919	100.0	100.0	—
1920	111.6	103.3	− 7.4
1921	94.2	100.7	+ 6.9
1922	91.3	95.3	+ 4.4
1923	95.4	88.2	− 7.5
1924	96.0	95.5	− .5
1925	98.3	103.4	+ 5.2
1926	98.8	104.6	+ 5.9
1927	98.8	115.9	+17.3
1928	101.7	130.9	+28.7

The index of the "hypothetical" price level $\frac{MV + M'V'}{T}$ presented in Table V was obtained in the following manner.

Index of M: (a) Allyn Young's "call date" estimates of "money in circulation not in banks" for 1919-1926 were averaged for the individual years; (b) the estimates for 1927 and 1928, each, were obtained by (1) averaging the "money held by national banks" on call dates; (2) adding this figure to an estimate of money held by "banks other than national banks," arrived at by multiplying the average amount of money in national banks on call dates by the ratio that money held by banks other than national bears to the money held by national banks on June 30; (3) subtracting this aggregate (*i. e.*, 1 + 2) from the annual averages of "monthly averages of daily figures of money in circulation"; (c) these estimates of "money in circulation not in

[46] M. A. Copeland, "An Estimate of Total Volume of Debits to Individual Accounts in the United States," *Journal of the American Statistical Association*, September, 1928, p. 303; C. Snyder, "The Measure of the General Price Level," *op. cit.*, p. 40.

[47] "Commodity Price Stabilization," *op. cit.*, p. 23.

[48] See note to Table V.

banks" were then converted into a series of relatives (*Review of Economic Statistics*, July, 1927, pp. 135-6; *Reports* of the Comptroller of the Currency and *Federal Reserve Bulletin*).

Index of $M'V'$: (a) Professor Copeland's estimates of total debits for 1919-1927 were converted into relative form (*Journal of the American Statistical Association*, September, 1928, p. 303)—the figures of Mr. Snyder when expressed as relatives give identical results (*Review of Economic Statistics*, February, 1928, p. 40); (b) the relative for 1928 is based on an estimate by the New York Federal Reserve Bank, arrived at by Professor Copeland's method.

Indexes of T and V are Dr. Anderson's. V is a constant. "The index [of T] is an arithmetic means of a production index and a transportation index. The index of production is a weighted average of indexes of agriculture (40), mining (7), and manufacturing (53), the data being drawn from the *Federal Reserve Bulletin*. The index of transportation is itself an average of the indices for tonnage of revenue freight, Class I railroads, ton-miles of revenue and non-revenue freight, and carloadings of revenue freight, based on data drawn from the Interstate Commerce Commission and the Bureau of Railway Economics" ("Commodity Price Stabilization," *op. cit.*, p. 23).

An index of $MV + M'V'$ was arrived at by weighting MV by 1 and $M'V'$ by 9, which is the method Dr. Anderson employed.

The use of a constant as an index of V and of the weights 9 and 1 for $M'V'$ and MV, respectively, are the most vulnerable points in the determination of the "hypothetical" P. Several computations, based on somewhat more plausible assumptions, were made; but these are not given in the "final revision" (Table V) in order to avoid the possible charge of manipulation. The general results obtained, moreover, were only slightly "better." This, of course, is to be expected, for MV is but a small fraction of $MV + M'V'$.

If the assumption is made that $V = V'$ (in relative form), the average discrepancy between the "hypothetical" and "actual" P is reduced to 5.1 per cent for the period 1920-1926. However, though this assumption may conform roughly to the facts during the period 1919-1926, it breaks down completely for 1927 and 1928. In these years (especially 1928) there was a tremendous rise in the velocity of bank deposits, occasioned probably by the unusual speculative activities of the time. But there is no reason for supposing that the increase in stock market operations affected V to any appreciable extent. (The V' figures referred to were obtained from Professor Copeland's estimates of total debits and Mr. Snyder's estimates of total deposits subject to check. The latter series is given through 1926 in Mitchell, *Business Cycles—The Problem and Its Setting*, p. 126. A revised figure for 1926 and preliminary estimates for 1927 and 1928 were obtained through the courtesy of the New York Federal Reserve Bank.)

In another computation, the assumption that $V = V'$ was retained, and the additional assumption was made that $\frac{M'V'}{MV}$ is an increasing ratio. A set of arbitrary weights was assigned to MV: 1919—12.5, 1920—12.0, ..., 1928—8.0, with complementary weights for $M'V'$: 1919—87.5, 1920—88.0, ..., 1928—92.0. An average discrepancy of 5.2 per cent for 1920-1926 was obtained by this method.

The possibility exists of checking, after a fashion, the assumption that $\frac{M'V'}{MV}$ is a rising ratio. If we assume that $V = V'$, we can compute readily an index of $\frac{M'V'}{MV}$. This index shows a remarkable advance during this period. Maxima of 145.6 and 147.0 were reached in 1926 and 1928, respectively (1919 = 100). On the other hand, if the assumption is made that $\frac{M'V'}{MV}$ is a constant (*cf.* W. C. Mitchell, *Business Cycles—The Problem and Its Setting,* pp. 127-128), an index of V is given by the ratio $\frac{M'V'}{M}$ $\left(\frac{M'V'}{M}\right.$ also gives the index of $\frac{M'V'}{MV}$ when V is a constant). The index of V so determined rises throughout the period (with small setbacks in 1921 and 1923). The figures for the last three years, with 1919 as a base, are 134.4, 143.7 and 171.5. These numbers appear much too high, especially the figure for 1928. It is extremely unlikely that V has increased by anything like 70 per cent during this decade (there is no evidence of a secular advance in V′). The inferences are suggested: (1) that there was a substantial secular increase in the ratio $\frac{M'V'}{MV}$ during this period, and (2) that the ratio $\frac{M'V'}{MV}$ was considerably above "normal" in 1928.

In effecting a general revision of Dr. Anderson's estimates, the several modifications suggested as so many ways of rectifying the technique of estimation have been observed. The set of revised estimates is given in Table V. A correct recognition of the implications of the equation of exchange has resulted in a rather close agreement between the "hypothetical" P and the "actual" P, despite the crudity of several of the constituent indexes. The largest discrepancy is twenty-nine per cent, and the disparity is larger than ten per cent in only two years. For the years 1920-1926 the concordance is remarkable, the average "error" (signs ignored, of course) being 5.4 per cent. It is only during 1927-1928 that the divergence between the "hypothetical" and "actual" P is at all marked. But this is not surprising. The heightened importance of the speculative factor in this two-year period renders our indexes of P and T quite unrepresentative of *general* prices and trade. It will be remembered that in Mr. Snyder's index of the general price level a set of constant weights is employed, and that Dr. Anderson's index of trade does not embrace speculative deals at all. But the increase in speculative trading—reflected insufficiently in P and not at all in T—has exerted a tremendous influence on the aggregate of payments. Bank debits for the country advanced from 704 billion dollars in 1925 to 750 billion dollars in 1926. But the next two years registered a much

larger rise, the figures of 823 and 963 billion being attained during 1927 and 1928, respectively.[49] In view of the known characteristics of the indexes employed, there would, indeed, be reasonable ground for concern if the two members of the equation showed a larger accord in these two years than they do.[50]

III

To these statistical observations, there are several theoretical considerations that must be added. Dr. Anderson considers the numeric determination of the factors in the equation of exchange superfluous, for this equation is "the simple truism . . . . that sellers receive what buyers pay." The "entire procedure" of measuring the individual factors is "irrelevant," and it is only "for the purpose at hand" that the "procedure of the quantity theorists" is followed.[51] These statements

[49] M. A. Copeland, *op. cit.* The figure for 1928 was obtained from the New York Federal Reserve Bank.

[50] This paper was already completed when Professor M. A. Copeland's article on "Special Purpose Indexes for the Equation of Exchange for the United States, 1919-1927" (*Journal of the American Statistical Association,* June, 1929) appeared. It is regrettable, therefore, that his statistical researches, especially his excellent index of T, could not have been considered in the body of the paper. If that had been done, the conclusions drawn in the statistical portion of this article would only have been strengthened. Professor Copeland's index of T is a broad composite resting on figures of transportation, manufacture, raw materials production, wholesale trade, retail trade, commodity futures, imports, exports, security transfers, etc. If Professor Copeland's index of T is substituted for the index of T employed in Table V, all other figures remaining the same, the following results are obtained:

Year	Hypothetical P $\left(\frac{MV+M'V'}{T}\right)$	Per cent by which Hypothetical P exceeds (+) or is exceeded by (—) Actual P
1919	100.0	....
1920	110.4	—1.1
1921	100.6	+6.8
1922	89.8	—1.7
1923	90.0	—5.7
1924	93.4	—2.7
1925	92.4	—6.0
1926	96.4	—2.5
1927	98.6	— .2

It will be noted, that the divergence between the two members of the equation (or, between the "actual" and "hypothetical" P) is much smaller on the whole in this set of computations than in Table V. In only two years is the disparity larger. The average discrepancy for the period 1920-1927 is 3.3 per cent. The remarkably close agreement in 1927 is especially striking. It will be recalled that stress was laid in the text on the special inadequacy of Dr. Anderson's index of T for 1927-1928. Regrettably, Professor Copeland's index does not cover 1928.

[51] "Commodity Price Stabilization," *op. cit.*, p. 23.

are remarkable in the light of the "fantastic results" that Dr. Anderson obtained through his statistical labors. The equation of exchange cannot be a "truism" and Dr. Anderson's calculations be correct at the same time! Dr. Anderson's confusion grows out of his misunderstanding of the import of the equation of exchange, a misunderstanding which regrettably obtains all too widely. A somewhat extended interpretation of this "tool of thought" seems, therefore, in place.

In recent years, algebraic statements have been employed rather extensively in the elucidation of the theory of the value of money. The fashion was started, I believe, by Simon Newcomb, the celebrated astronomer and economist. Walras, Edgeworth, Hadley, Fisher, Kemmerer, Schumpeter, Cassel, Pigou, Keynes, Rueff, and others have seen in algebraic formulations a considerable aid in illuminating the elementary relations among the factors determinative of the value of money. Algebraic statements in expositions of the theory of the value of money are fundamentally of two types: equations that embrace a period of time —"historical" equations, and those that refer to a point in time— "cross-section" equations.[52] The equation of exchange, introduced by Simon Newcomb as the "equation of societary circulation,"[53] is the most widely known of these algebraic expressions, and is obviously an "historical" equation. Another algebraic formulation that comes under this category is that worked out by Professor Schumpeter; this equation aims to present systematically the relation of money incomes, currency, and its "circuit velocity," and prices and quantities of consumers' goods.[54] A "cross-section" equation employed in disquisitions on the value of money is generally an equation of the demand and supply of money. The most familiar of the "cross-section" equations is that of Mr. Keynes.[55]

The mathematical apparatus that monetary theorists utilize is deemed by many confusing, or else "idle and pedantic." However, those who use this organon to the best advantage are loath to dispense with it— though they could easily do so—for they see in it a large intellectual convenience. An algebraic formulation is, to them, a method of organizing systematically and synoptically the putative determinants of the value of money. In the words of Professor Pigou, "the formulae employed . . . . are merely devices for enabling us to bring together in an orderly way the principal causes by which the value of money is de-

[52] *Cf.* G. Cassel, *The Theory of Social Economy* (McCabe's translation), p. 424.

[53] *Principles of Political Economy*, p. 328.

[54] J. Schumpeter, "Das Sozialprodukt und die Rechenpfennige," *Archiv für Sozialwissenschaft und Sozialpolitik*, July, 1918. *Cf.* W. T. Foster and W. Catchings, *Money*, chapter XVIII.

[55] *Monetary Reform*, pp. 81-95. *Cf.* J. H. Rogers, *The Process of Inflation in France, 1914-1927*, chapter XII.

termined."[56] And Professor Fisher writes of his treatment: "the purchasing power of money . . . . depends exclusively on five definite factors . . . . their relation to the purchasing power of money is definitely expressed by an 'equation of exchange.' "[57] Algebraic formulations are employed, then, as shorthand expressions that unite succinctly a number of important factors, and are useful largely as an orientation for methodical exposition. They are used as so many instruments for "working on the facts and as vises for holding them firmly in position for the work."[58] On the whole, they are to be viewed in the same light as all deductive propositions—that is, as "means of determining the phenomena of any given society from the particular elements or data of that society."[59]

The algebraic formulations employed by monetary theorists, in and of themselves, do not constitute a proof of one theory of the value of money any more than of another. As Professor Fisher has written, "the equation of exchange, of itself, asserts no causal relations between quantity of money and price level, any more than it asserts a causal relation between any other two factors."[60] Algebraic statements have been used almost exclusively—for reasons which are not far to seek—by quantity theorists, but they can be used with equal advantage by banking theorists, or by any other school. The establishment of a theory of the value of money may be aided by employing an algebraic formula (such as the equation of exchange) in the same sense in which it may be aided by statistics of currency, deposits, trade, and prices. Neither the one nor the other is anything but an instrument, to be used for good or ill, in the construction of a theory of money value, of one complexion or another. When Dr. Anderson declares, therefore, that a fulfillment of the equation of exchange "would justify" the quantity theory, and that his own statistical work, which "spoils" the equation of exchange, "disappoints" the quantity theory,[61] he shows a rather gross misapprehension of both the equation of exchange and the quantity theory. For the quantity theory of money aims merely to illuminate actual changes in the value of money, and is *causal* in form. A serious criticism of the quantity theory, from a methodological standpoint, must show either that the causal sequence advanced by quantity theorists is inconsistent with recorded experience, or else that another theory, equally concordant with the facts, affords a more plausible explanation of them.

[56] "The Value of Money," *Quarterly Journal of Economics*, Nov., 1917, p. 38.
[57] *The Purchasing Power of Money*, p. VII.
[58] A. Marshall, *Principles of Economics* (8th ed.), p. 779.
[59] J. S. Mill, *System of Logic* (Longman's ed.), p. 586.
[60] *The Purchasing Power of Money*, p. 156. *Cf.* B. M. Anderson, Jr., *The Value of Money*, p. 336.
[61] "Commodity Price Stabilization," *op. cit.*, p. 24.

If the conception of the equation of exchange as an "apparatus of thought" is well taken, then, it can no longer be maintained that this equation is a "simple truism." Since the equation of exchange, as employed by Professor Fisher, expresses the price level as a function of five independent variables and states the form of the function, it is much more than a "simple truism." Moreover, the equation of exchange, in the form generally used, is as a matter of fact never precisely true at all. Simon Newcomb who devised this equation found it necessary to state a number of considerations that made for inequality, and, in fact, suggested the exclusion of some items and the insertion of an arbitrary constant in order to effect a balance between the two members of the equation.[63] This is a point that will bear systematic analysis.

If we take a single sale and purchase transaction, in which the processes of pricing, delivery, and payment are synchronous, the money (cash or deposit currency) paid for the goods (commodities or services) may be equated with the pecuniary value of the goods transfers. If this expression is extended to cover all the exchange transactions of a community for a certain period, the assumption of simultaneity in the several elements of the trading process being retained, it will show an equality between the sum of money payments and the pecuniary volume of goods transferred. This truistic expression is not the equation of exchange with which monetary theorists generally work. If, as a first step, the sum of money transfers is decomposed into four factors —money, deposits, and their respective velocities, and the pecuniary volume of goods transfers is broken up into two components—an index of prices and an index of trade (a definition being given to either of these terms, and the other being determined thereby), and as a second step, the assumption of simultaneity is dropped, the equation in the form in which it is generally employed is obtained. But a perfect balance between the two members of this transformed equation is practically impossible, for it is very unlikely that the money transfers unaccompanied by goods transfers will just equal the goods transfers unattended by money transfers.

If the two aggregates—money payments and pecuniary volume of goods transfers—are factored in the manner described above; if, further, the assumption of concurrence in pricing, deliveries and payments is dropped; and if besides, the assumption of concomitance implicit in the

[63] *Principles of Political Economy*, pp. 332-334. *Cf.* also I. Fisher, "The Rôle of Capital in Economic Theory," *op. cit.*, p. 516 and *The Purchasing Power of Money*, pp. 370-375; J. P. Norton, *Statistical Studies in the New York Money Market*, p. 2; W. T. Foster and W. Catchings, *op. cit.*, pp. 163-167; W. C. Mitchell, *Business Cycles —The Problem and Its Setting*, pp. 130-132; J. H. Rogers, *op. cit.*, p. 304; and M. A. Copeland, "Two Hypotheses Concerning the Equation of Exchange," *Journal of the American Statistical Association*, March, 1929, Supplement, p. 147.

postulate of simultaneity is now made explicit and retained; then, we arrive at an equation in which the relation between the two members can only be expressed as a function of time. If the period covered by the equation is very short, say a day, MV + M′V′ may depart indefinitely from PT, for it is very unlikely that the prices ruling on a given day when multiplied by the quantities sold on that day will approximate the money payments then made.[64] But if the period is longer, say a year, the bulk of the payments made will be for given year deliveries at given year prices, and the payments for deliveries prior to the given year and for deliveries that have yet to be made will very nearly balance the unpaid deliveries of the year.[65] If business conditions are "uniform" throughout the year (and a short period preceding it), the disparity will be smaller than in an interval marked by "change" in the business situation. It does not follow that the "longer the interval, the better for the equation,"[66] for in a rapidly advancing economy, if the period is long, say ten years, the second side of the equation will be substantially larger than the first, in absolute though not in percentage terms.

Finally, if the assumption of concomitance of pricing, deliveries, and payments, retained in the last paragraph, is now dropped, we envisage several additional circumstances that make for a divergence between the two sides of the equation of exchange. In the first place, not all prepayments will be followed by deliveries, or deliveries by payments; and it is unlikely that these breaches of faith—voluntary and involuntary—will ever be fully compensatory. Secondly, there are large flows of money that are neither payments for commodities nor for services, unless the term "services" be extended beyond all recognition. The several categories of private income—wages, salaries, commissions, dividends, profit, rent, interest, fiduciary income, etc.—may be viewed as payments for services, though the term "service" seems more appropriate, or at least obvious, in the case of "labor" than in the case of "ownership" incomes. The components of public income—taxes, special assessments, fees, fines, indemnities, etc.—may also be brought within the meaning of the phrase "payments for services," though its application to fines and tributes is at once strained and ironic, and in the case of taxes a one-to-one relationship between payments and services cannot be said to exist.[67] But the term "service" cannot reasonably be etherealized still further to include loans and their repayment, gifts, benevolences, payments of wagers, relocations of funds from one bank to another, etc. There is

[64] W. C. Mitchell, *Business Cycles—The Problem and Its Setting,* p. 131.

[65] The prices of the "unpaid deliveries" are either of the given year or of preceding periods; while the payments and deliveries are confined to the given year, the prices of the deliveries are not so limited.

[66] W. C. Mitchell, *Business Cycles—The Problem and Its Setting,* p. 131.

[67] E. R. A. Seligman, *Essays in Taxation* (10th ed.), chapter XIV.

a substantial volume of money transfers, then, that is unaccompanied by transfers of goods. And in the third place, there are the good transfers unattended by money transfers, as in the case of barter transactions and deals on the exchanges where only the "uncleared" residuum leads to money payments. It is unlikely, once more, that the pecuniary volume of goods transfers effected without money will be the precise equivalent of money payments unaccompanied by goods transfers.

This analysis by no means invalidates the equation of exchange in the form in which it is generally used. The aim has been simply: first, to show that the equation of exchange is not—as Dr. Anderson thinks—"the simple truism . . . . that sellers receive what buyers pay," and second, to trace the several factors that make for asymmetry in the equation. One of the salient features of our modern economic organization is that "economic activities are now carried on mainly by making and spending money."[68] Though the factors making for inequality are important, they are overshadowed by the day-by-day exchange processes of our "business economy." Moreover, the compensation among the elements that make for deviation from equivalence is probably very large, and the conclusion seems warranted that when the equation of exchange is taken to refer to some such interval as a year, "the two sides of the equation are nearly equal in fact."[69]

IV

The quantity theory of money occupies an important position in the literature of price stabilization.[70] It is generally invoked in support of the putative workability of central bank regulation of the general price level. Many of the most clamorous workers in the cause of stable money are supporters of the quantity theory, and the really prominent schemes for achieving price stability have originated almost invariably with economists who profess the quantity theory. It is small wonder, then, that the quantity theory is widely considered as the *Ursprung* of programs of price stabilization, in general, and the plan of price stabilization through central bank action, in particular. But the quantity theory is not a *necessary* theoretical substratum for the proposal that general price movements be subjected to deliberate control by central banks. This project may be advanced with equal nicety and consistency by adherents of the banking theory. It is noteworthy that Professor Cassel, the most prominent world militant for price stabilization by the medium of discount rate manipulation, appears almost as much of a banking theorist as a quantity theorist in his recent writings on monetary

[68] W. C. Mitchell, *Business Cycles—The Problem and Its Setting*, p. 62.
[69] *Ibid.*, p. 131.
[70] See J. S. Lawrence, *Stabilization of Prices*, pp. 432-433, *et seq.*

topics.[71] Just as a quantity theorist may argue that a change in the discount rate will be followed by an inverse movement of the volume of loans and therefore of currency, and that this, in turn, will lead to a similar change in the price level—that the sequence will be, that is, from the discount rate to currency to prices; so a banking theorist may formulate the alternative causal catena, that a rise, let us say, in the discount rate will lead to a revision of business expectations, and that reduced orders, lower prices, and declining loans, deposits, and money in hand-to-hand circulation will follow. That theorizing on either the first or second patterns contains a greater tone of dogmatism than a close scrutiny of the empirical evidence we have would warrant is all very well, but not a matter of concern in this connection. The point is simply that Dr. Anderson's belief that the proposal for price stabilization through central bank action stands or falls with the quantity theory of money—though more understandable and less important than his other misapprehensions of the quantity theory—is not much better as a starting point for the "test" of the quantity theory which he sets up than is that test itself.

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[71] Professor Cassel's present formulation of the quantity theory differs materially from the theory he expounded in *The Theory of Social Economy* (chapter XI). Though he still presents as the final result of his analysis a "rigid quantity theory" (*i.e.*, that the real value of a variable currency aggregate is a constant), he leans heavily toward the banking theory in the causal catena that he advances. His reformulation, briefly put, is as follows: If the quantity of money is increased, prices will rise, but it is impossible to state to what extent. Once the rise has taken place, the quantity of money in circulation will adjust itself to the new price level. In the end, therefore, the quantity of money and the price level will show proportionate advances. See *Money and Foreign Exchange after 1914*, pp. 26-32, *The Theory of Social Economy*, Appendix II, *Fundamental Thoughts in Economics*, pp. 144-146, and *Post-War Monetary Stabilization*, pp. 5-7.

RENT UNDER INCREASING RETURNS

The economics textbooks now pouring from the competing presses give more attention to the behavior of costs and returns as influenced by variation in factoral proportion than did the older treatises. Formerly, "diminishing returns" were explained simply and briefly, and without hint of puzzling but significant complexities. The fact of diminishing returns was said to be known to every practical farmer. Once stated, with a few simple hypothetical illustrations, it was supposedly patent to the most obtuse sophomore. Why, then, make a difficult matter of it? If the older writers recognized a stage of increasing factoral returns[1] at all, they did so incidentally. It was regarded as of negligible import, either theoretically or practically. Some of the more recent texts, however, go into the matter with all the apparatus of the engineer and cost accountant.[2] They show how the presence of a stage of increasing factoral returns complicates the analysis, which formerly was so simple. But neither the old texts nor the new attempt to determine what bearing, if any, the existence of an initial stage of increasing factoral returns may have upon the theory of rent.

The basic conception of returns in relation to variation of factors is now essentially this: that successive equal additions, or doses, of the variable factor, or input, applied to a definite quantity of the factor held constant, yield, up to a certain amount of input, successively larger increments of return; further amounts of input yield successively diminishing increments of returns. This point, at which increments of return cease increasing and begin to decrease, is the point of diminishing incremental return (P_i). Perhaps it were better called the point of maximum incremental return. Furthermore, the average return, per unit of input, increases up to a certain amount of input, which is larger than the amount of input the last unit of which yields the maximum increment of return. The amount of input with which the maximum average return is obtained gives us the point of diminishing (better called maximum) average returns (P_a). This, of course, is to be sharply distinguished from the point of maximum incremental return.

Most writers mean by the phrase "diminishing returns" diminishing average returns, though some do not take the trouble to say what they mean. Most writers, also, have used the phrase "marginal returns" when they have had occasion to refer to what is here called incremental returns. The latter term is preferable, since the term "marginal" has been used in so many senses that it no longer has any certain meaning. It

[1] Increasing returns from large scale production do not enter into the present discussion.

[2] See, for example, John D. Black, *Production Economics,* 1926.

is scarcely necessary to add, in passing, that the terms "successive," "increasing," and "decreasing" are here used in a logical, and not a time, sense. In an analysis of factoral proportion and returns, static conditions, in two senses, are assumed; there is no passage of time between two "successive" inputs, and there is no change in the "state of the arts." This last, however, is a sort of Banquo's ghost. It will not "stay put" and is ever returning to plague the static theorist. This difficulty is taken up later in this article.

Most textbooks state that rent does not emerge until the point of diminishing returns (whether incremental or average is not always made clear) is reached, and thereby imply that rent does emerge immediately that point is passed.[3] In connection with some thought relative to the as yet undeveloped theory of the optimum population—a concept which, whatever the criterion of "optimum" is taken to be, involves the positing of a stage of increasing returns—the present writer has had occasion to consider the bearing of land rent on the problem of the rationally best size of population and tentatively to question the commonly accepted doctrine of the relation of rent to the points of diminishing returns. The present discussion is thus a by-product, and the only excuse for publishing it is that it may be of some incidental interest to pure theorists and may suggest the desirability of a slight increase of caution in making unqualified generalizations regarding the relation of costs and returns to the emergence of rent. The subject, to the unwary, is full of pitfalls. Such results as are arrived at in this article are admitted to be highly theoretical and of doubtful applicability to actual conditions in a settled and mature country. It is possible, however, that there may be conditions, for instance in the agricultural conquest of the tropics—a conquest which indefinitely continued growth of world population will necessitate—in which some of the theoretical results at which we herein arrive may have practical bearing.

Four questions present themselves. Assuming an initial stage of increasing returns, and that, to begin with, all land is free: (1) Will cultivation be extended to inferior land as soon as all the best land is occupied and the point of diminishing returns (either one) has been passed on the best land? (2) Are there conceivable circumstances in which cultivation would be extended to poorer land *before* diminishing returns (either incremental or average) are encountered on the best land? (3) Will the best land necessarily command a rent as soon as the point of diminishing returns (either incremental or average) has been passed? (4) Can the

[3] Thus Bye: "It would not be wise, of course, to begin to cultivate the poorer lands until diminishing returns had begun to result from the cultivation of the better ones." *Principles*, 1924, p. 113. The same implication is in Fairchild, Furniss and Buck, *Elementary Economics*, 1926, vol. II, pp. 115, 116.

better land, under any conceivable circumstances, command a rent *before* that point?

It will be shown that where there is an initial stage of increasing returns inferior land will *not* necessarily be resorted to as soon as the point of maximum average, P_a, let alone that of maximum incremental, P_i, returns has been reached. Before attempting to analyze the influence of the stage of increasing returns, however, it will be of interest to re-examine the conventional case in which no such stage is presupposed. We shall thus be able to see, at the outset, the significance of the size of the units of input.

Even where there is no initial stage of increasing returns assumed—where, in other words, it is assumed that diminishing returns set in with the second dose of input—the common implication that cultivation will be extended to inferior land as soon as diminishing returns are encountered on the best land is lacking in precision. Only on the assumption of the use of large doses of input is the implication true. This is easily shown by the conventional columnar diagram. Suppose that on two tracts of land, A, the superior, and B, the inferior (Figure 1), large-sized doses of input are applied. Since the product (rectangle a′) of dose 1 on B is larger than the product (rectangle b) of dose 2 on A, cultivation is extended to B immediately when more than one dose of input is available.

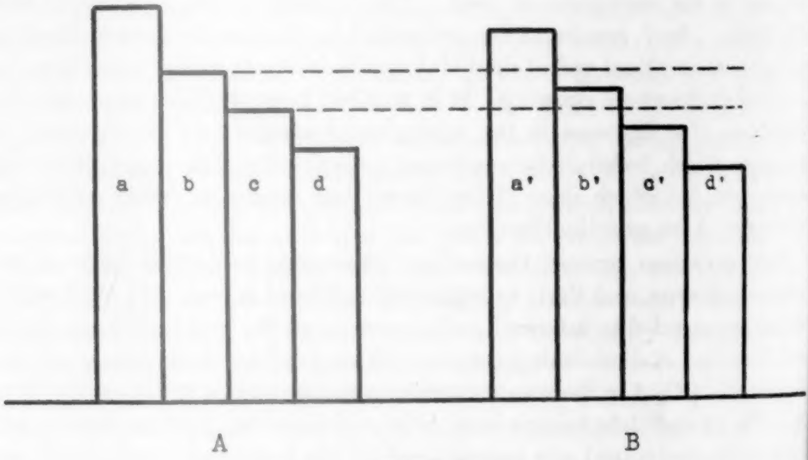

FIGURE 1

If, however, we apply smaller doses of input, or smooth out a continuously declining incremental-returns curve (Figure 2) it is clear that resort will *not* be had to B at once. The inferior land will be resorted to only when the marginal increment, mm′, on A is no larger than the initial increment, ii′, on B.

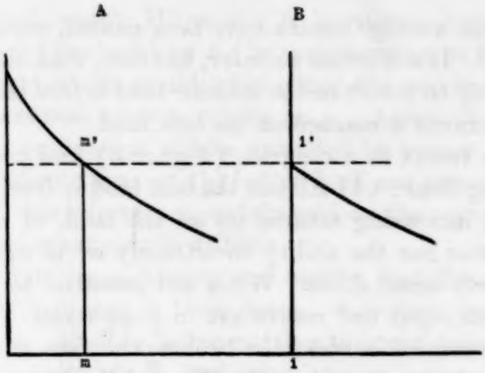

FIGURE 2

The needed modification of the conventional statement is perhaps only verbal. Nevertheless, this brief reference to a case in which it is assumed that there is no initial stage of increasing returns is worth while because it suggests the significance of the size of the doses of input. When we analyze the combination of increasing and decreasing returns, size of dose takes on still greater significance.[4]

If inferior land will not be resorted to at once under conditions where diminishing returns are encountered on the best land practically at the start, it is much more probable that where there is an appreciable initial stage of increasing returns, cultivation will not, ordinarily, be extended to inferior land until both the point of maximum incremental return and

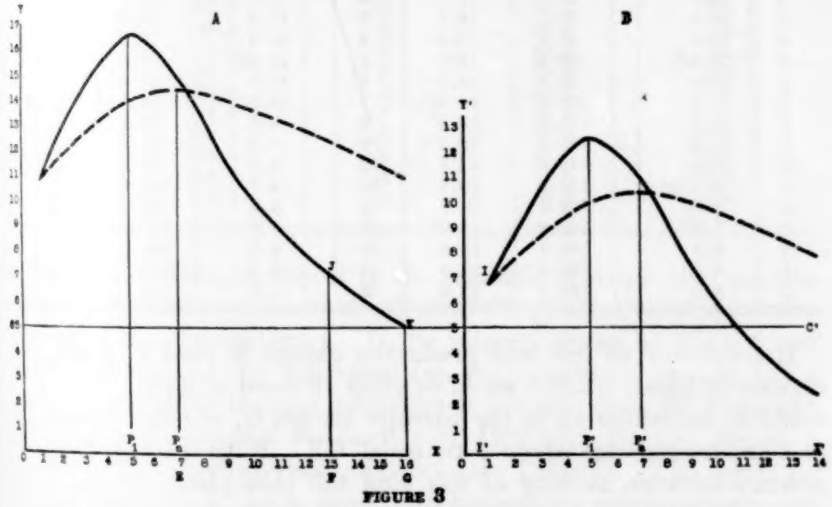

FIGURE 3

[4] The influence of size of doses is brought out by F. Y. Edgeworth, in "The Laws of Increasing and Diminishing Returns," *Papers relating to Political Economy*, 1925, vol. 1, pp. 65, 66.

that of maximum average return have been passed, perhaps far passed, on the best land. It will be shown later, however, that under certain conditions it will pay to resort to the inferior land *before* the point of maximum average returns is reached on the best land.

Let us again resort to a diagram (Figure 3) and proceed under the following assumptions: (1) All but the best land is free; (2) there is an initial stage of increasing returns on all the land, of whatever grade; (3) the cultivator has the ability to intensify or to extend cultivation only by relatively small doses. While not essential to do so, we shall assume that both input and return are in price terms. The continuous curves are incremental curves; the broken ones are curves of average return, and are drawn to scale. P_i, P'_i, and P_a, P'_a, are the points of maximum incremental return and of maximum average return, respectively, on the two tracts of land. Vertical distances represent prices of input and of product. The horizontal line CC′ represents, at five price units above OX (or O′X′), the expense of each dose of input. Table I gives the hypothetical data upon which the curves are based.

TABLE I

Tract A				*Tract B*			
Dose	Incremental return	Total return	Average return	Dose	Incremental return	Total return	Average return
1	10.8	10.8	10.8	1	6.8	6.8	6.8
2	12.5	23.3	11.7	2	8.5	15.3	7.7
3	14.4	37.7	12.6	3	10.4	25.7	8.6
4	15.8	53.5	13.4	4	11.8	37.5	9.4
5	16.5 P_i	70.0	14.0	5	12.5 P'_i	50.0	10.0
6	16.0	86.0	14.3	6	12.0	62.0	10.3
7	14.8	100.8	14.4 P_a	7	10.8	72.8	10.4 P'_a
8	13.2	114.0	14.3	8	9.2	82.0	10.3
9	11.5	125.5	13.9	9	7.5	89.5	9.9
10	10.0	135.5	13.6	10	6.0	95.5	9.6
11	8.7 }45.0	144.2	13.1	11	4.7	100.2	9.1
12	7.8	152.0	12.7	12	3.8	104.0	8.7
13	7.0	159.0	12.2	13	3.0	107.0	8.2
14	6.3	165.3	11.8	14	2.3	109.3	7.8
15	5.5	170.8	11.4	15	2.0	111.3	7.4
16	5.0	175.8	11.0	16	1.8	113.1	7.1

If there were no free land productive enough to yield a surplus over expense of input, tract A would be given 16 doses of input. That is, it would be cultivated up to the intensive margin G, at which incremental cost and incremental product are equal, GK. With tract B, free land, present, however, nothing of this kind will take place, for the simple reason that the cultivator would get more product from dose 1 on B than he would from either dose 14, 15, or 16 on A. Since land B is free, cultivation of A will stop at F, where the increment return, FJ, is

equal to the initial return, II′ on B. It is evident, however, that it is economical to carry the input on A (before resorting to B) considerably beyond the amount which would yield either the maximum incremental return or the maximum average return on A. Again, the erroneousness of the idea that cultivation will be extended to poorer (free) land as soon as diminishing returns on the better land are encountered is clear. But the truth of this inference is certain only on the assumption that the cultivator can add input only in driblets.

Let us now alter this condition and assume that the cultivator is in position to apply his input in large doses. A curious problem now confronts him and us. Shall he, after putting thirteen doses of input on A and beginning to cultivate B, and experiencing increasing incremental returns on B, continue to cultivate A beyond the point of maximum average returns, or shall he withdraw some input from A and devote it to intensifying the cultivation of B? At what point should he cease intensifying the culture of A? No general answer to this question appears

TABLE II

TOTAL PRODUCTS FROM DIFFERENT DIVISIONS OF 13 DOSES OF INPUT BETWEEN LAND A AND LAND B

Doses on A	Total products on A	Doses on B	Total products on B	Combined products
1	10.8	12	104.0	114.8
2	23.3	11	100.2	123.5
3	37.7	10	95.5	133.2
4	53.5	9	89.5	143.0
5	70.0	8	82.0	152.0
6	86.0	7	72.8	158.8
7	100.8	6	62.0	162.8
8	114.0	5	50.0	164.0
9	125.5	4	37.5	163.0
10	135.5	3	25.7	161.2
11	144.2	2	15.3	159.5
12	152.0	1	6.8	158.8

feasible, farther than to appeal to the economic principle that an item of expense should be put where it will yield the greatest surplus possible to it under the circumstances. If the returns are as in Table I and Figure 3, it will pay the cultivator (on the assumption that he has a total of only 13 doses of input available) to take five doses off A and put them on B, since the first five on B yield 50.0 while the last five on A (doses 9 to 13 inclusive) yield only 45.0 (see Table I). This would reduce the input on A to a point just beyond the point of maximum average return, and fall somewhat short of bringing the input on B up to the corresponding point. This is brought out in Table II and

graphically in Figure 4, in which the total-returns curves are plotted. The curve for B is reversed and inverted, and the vertical distance between the two curves at any point gives the total product of 13 doses of input, divided as they are, at that particular point, between the two tracts of land. Thus 10 doses on A plus 3 doses on B give a product of 161.2. The maximum product is 164, obtained by putting 8 doses on A and 5 on B.

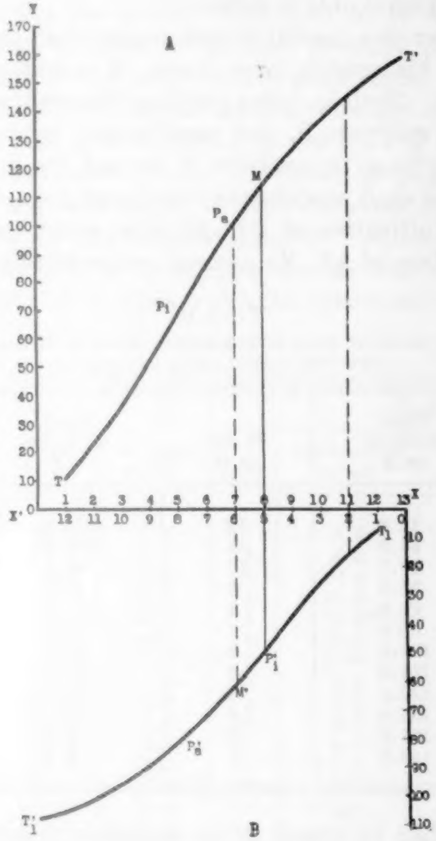

FIGURE 4

13 doses are assumed to be available
TT'=total returns curve of land A
T_1T_1'=total returns curve of land B
P_1=point of maximum incremental return on A
P_a=point of maximum average return on A
P_1'=point of maximum incremental return on B
P_a'=point of maximum average return on B
MP_1'=maximum product of 13 doses divided between A and B
Any combination between the dotted lines gives a higher total return than would be gained if all 13 doses were put on A.

Table III
(Based on Table I)

Total Doses: →			2		3		4		5		6		7		8		9	
Doses on A	Average returns on A	Total returns on A	D*	CT†	D_b	CT	D_b	CT	D_b	CT	D_b	CT	D_b	CT	D_b	CT	D_b	CT
1	10.8	10.8	1	176	2	26.1	3	36.5	4	48.3	5	60.8	6	72.8	7	83.6	8	92.8
2	11.7	23.3			1	30.1	2	38.6	3	49.0	4	60.8	5	73.3	4	85.3	7	96.1
3	12.6	37.7					1	44.5	2	53.0	3	63.6	4	75.2	5	87.7	6	99.7
4	13.4	53.5							1	60.3	2	68.8	3	79.2	4	91.0	5	103.5
5	(P_i)14.0	70.0									1	76.8	2	85.3	3	95.7	4	107.5
6	14.3	86.0											1	92.8	2	101.3	3	111.7
7	(P_a)14.4	100.8													1	107.6	2	116.1
8	14.23	114.0															1	120.8
9	13.9	125.5																
10	13.6	135.5																
11	13.1	144.2																
12	12.7	152.0																
13	12.2	159.0																
14	11.8	165.3																
15	11.4	170.8																
16	11.0	175.8																

Total Doses: →	10		11		12		13		14		15		16	
Doses on A	D_b	CT	D_b	CT	D_b	CT	D_b	CT	D_b	CT	D_b	CT	D_b	CT
1	9	100.3	10	106.3	11	111.0	12	114.8	13	117.8	14	120.1	15	122.1
2	8	105.3	9	112.8	10	118.8	11	123.5	12	127.3	13	130.3	14	132.6
3	7	110.5	8	119.7	9	127.2	10	133.2	11	137.9	12	141.7	13	144.7
4	6	115.5	7	126.3	8	135.5	9	143.0	10	149.0	11	153.7	12	157.5
5	5	120.0	6	132.0	7	142.8	8	152.0	9	159.5	10	165.5	11	170.2
6	4	123.5	5	136.0	6	148.0	7	158.8	8	168.0	9	175.5	10	181.5
7	3	126.5	4	138.3	5	150.8	6	162.8	7	173.6	8	182.8	9	190.3
8	2	129.3	3	139.7	4	151.5	5	*164.0*	6	*176.0*	7	186.8	8	196.0
9	1	132.3	2	140.8	3	151.2	4	163.0	5	175.5	6	*187.5*	7	*198.3*
10			1	142.3	2	150.8	3	161.2	4	173.0	5	185.5	6	197.5
11					1	151.0	2	159.5	3	169.9	4	181.7	5	194.2
12							1	158.8	2	167.3	3	177.7	4	189.5
13									1	165.8	2	174.3	3	184.7
14											1	172.1	2	180.6
15													1	177.6
16														

* D_b means number of doses of input on land B.
† CT means the combined total return obtained from both A and B.

By the construction of tables similar to Table II, for any given total number of doses available, it can be shown what division of input between the two pieces of land will give the maximum total return. Better yet, it is possible to construct a single table which will show the most advantageous distribution for any given total number of doses available. Table III, based on Table I, gives the total returns for all combinations for all total numbers of doses up to 16. The first column gives the numbers of doses on A, the second column the average returns on A, the third the total return for any given number of doses on A. The columns headed D_b give the numbers of doses on B which are combined with the total doses on A specified in Column 1. The columns headed CT give the total returns for any combination of doses. The first line of figures at the top of the table shows the total number of doses from which any CT is derived. Thus with a total of 13 doses, 12 doses on A plus 1 dose on B give a return of 158.8.

Inspection of Table III shows that with the equivalent of anything less than 13 doses all input should be directed to land A, since 12 doses on A yield a total return of 152 while the largest return from any division of 12 doses between A and B is only 151.5. If 13 doses are available the best combination is 8 doses on A and 5 on B, though rather than put all 13 doses on A it will pay to devote anywhere between 2 and 6 doses to B. If 14, 15, or 16 doses are available there is still greater leeway. There is in each case a best combination; but with a total of 16 doses, for instance, it will pay better to put anywhere from 1 to 10 of them on B rather than to put all 16 on A, since if all are devoted to A the total product is only 175.8 while it ranges from 177.6 (with 15 on A and 1 on B) up to a maximum of 198.3 (with 9 on A and 7 on B) and then down again to 181.5 (with 6 on A and 10 on B). These ranges are shown by the brackets in Table III. The ranges for a total of 13 doses are shown by the dotted lines in Figure 4.

Now not forgetting that we are seeking to ascertain how soon beyond the point of maximum average return on A it will pay to extend cultivation to B when the cultivator is in position to allot his input in large quantities (rather than in piecemeal doses), we observe some interesting results in Table III. If, for instance, the cultivator has input equal to 13 doses, rather than devote all 13 to A, he should resort to B with 6 doses and put only 7 doses on A. Seven doses on A give the maximum average return on A. Hence, we seem to have confirmation of the idea that cultivation will be extended to B as soon as this point is reached on A. *But* this is not what the cultivator should do, if maximum economy is the aim. He should put 8 doses on A and only 5 on B. Moreover, if he has the equivalent of 14 doses available, the somewhat surprising result appears that he should (rather than put all 14 on A) resort to B

before the point of maximum average returns is reached on A, in fact immediately after the point of maximum incremental returns has been passed on A. But here again his *best* advantage lies in carrying cultivation of A a little beyond the point of maximum average returns.

Table IV shows the most productive division of input between A and B for any total of doses from 12 to 16. Most significant is the fact that

Table IV*
MAXIMUM TOTAL RETURNS

Total doses	Doses on A	Return on A	Doses on B	Return on B	Total return
16	9	125.5	7	72.8	198.3
15	9	125.5	6	62.0	187.5
14	8	114.0	6	62.0	176.0
13	8	114.0	5	50.0	164.0
12	12	152.0	—	—	152.0

* Based on Table III.

when only 12 doses or less are available they should all go to A. This means that cultivation of A is carried far beyond the point of average maximum return before it pays to think of resorting to B. This is due, of course, to the fact that the early low incremental returns on B have to be overcome.

In the case just presented, the fundamental data of which are given in Table I, the conventional statement seems to be confirmed for any total of input over 12 doses. *Given adequate resources in input,* it seems, thus far, that cultivation should be extended to the inferior land soon after the point of maximum average returns is reached on the best land. If we assume that the difference between one grade of land and another is usually comparatively small, this may be regarded as the typical case. But it is not universally so. It is entirely possible that the second best land is greatly inferior to land of A grade. In this case it will not pay to resort to B land, no matter how large the total input, until cultivation on A land has been carried far beyond the point of maximum average return.

Assume schedules of returns as in Table V. The point of maximum average return on A is at the third dose of input, which happens to be also, though this is of no particular significance, the point of maximum incremental return. On land B the point of maximum average return is at the eighth dose, that of maximum incremental return at the third dose. The respective curves of incremental returns are shown in Figure 5.

Table VI shows, for any total of input, the stage in the cultivation of A at which it would pay to put some input on B, and also what division of input between the two tracts would be most productive. If only 12

TABLE V

Land A				Land B			
Dose	Incremental returns	Total returns	Average returns	Dose	Incremental returns	Total returns	Average returns
1	9.0	9.0	9.0	1	2.0	2.0	2.0
2	9.6	18.6	9.3	2	4.3	6.3	3.2
3	10.0P_i	28.6	9.53P_a	3	4.6P_i'	10.9	3.6
4	9.4	38.0	9.5	4	4.5	15.4	3.85
5	7.8	45.8	9.2	5	4.4	19.8	3.96
6	6.5	52.3	8.7	6	4.3	24.1	4.02
7	5.4	57.7	8.2	7	4.2	28.3	4.04
8	4.8	62.5	7.8	8	4.1	32.4	4.05P_a'
9	4.3	66.8	7.4	9	4.0	36.4	4.04
10	4.0	70.8	7.1	10	3.8	40.2	4.02
11	3.7	74.5	6.8	11	3.6	43.8	4.0
12	3.5	78.0	6.5	12	3.4	47.2	3.9
13	3.3	81.3	6.3	13	3.0	50.2	3.9
14	3.1	84.4	6.0	14	2.5	52.7	3.8
15	3.0	87.4	5.8	15	2.3	55.0	3.7+

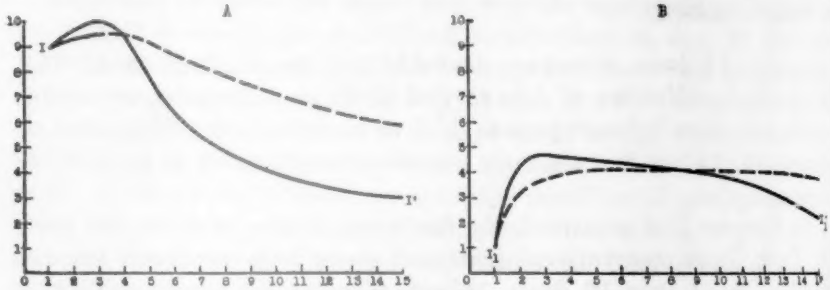

FIGURE 5

doses are available, they should all go to A. If the cultivator has the equivalent of 13 doses the most profitable combination is 8 doses on A and 5 on B; with 15 doses, it is 9 on A and 6 on B. These most profitable combinations are summarized in Table VII. We have here a case somewhat different from that in Table I. Here the point of maximum average return on A is at the third dose, but the earliest point at which it would be better to resort to B is with the sixth dose on A, and the point of most productive division comes far later, at the eighth or ninth dose on A. More cogent still, if only 12 doses are available, it pays to put them all on A. Again we see that it does not pay to resort to B until either the incremental return on A has fallen to a very low point or enough input is available to overcome the effect of the initial low incremental returns on B. Thus, whether small or large amount of input is available, the proper thing to do is to carry cultivation of A far beyond the point of maximum average return. The conventional statement no longer holds true.

Our first question is now answered in the negative. Ordinarily, where we have initial stages of increasing returns, it will not pay to extend

Table VI
(Based on Table V)

Total Doses:→			2		3		4		5		6		7		8	
Doses	Average returns	Total returns	D_b	CT	D_b	CT	D_b	CT	D_b	CT	D_b	CT	D_b	CT	D_b	CT
1	9.0	9.0	1	11.0	2	15.3	3	19.9	4	24.4	5	28.8	6	33.1	7	37.3
2	9.3	18.6			1	20.6	2	24.9	3	29.5	4	34.0	5	38.4	6	42.7
3	$9.53P_a$	$28.6P_i$					1	30.6	2	34.9	3	39.5	4	44.0	5	48.4
4	9.5	38.0							1	40.0	2	44.3	3	48.9	4	53.4
5	9.2	45.8									1	47.8	2	52.1	3	56.7
6	8.7	52.3											1	54.3	2	58.6
7	8.2	57.7													1	59.7
8	7.8	62.5														
9	7.4	66.8														
10	7.1	70.8														
11	6.8	74.5														
12	6.5	78.0														
13	6.3	81.3														
14	6.0	84.4														
15	5.8	87.4														

Total Doses:→	9		10		11		12		13		14		15	
Doses	D_b	CT	D_b	CT	D_b	CT	D_b	CT	D_b	CT	D_b	CT	D_b	CT
1	8	41.4	9	45.4	10	49.2	11	52.8	12	56.2	13	59.2	14	61.7
2	7	46.9	8	51.0	9	55.0	10	58.8	11	62.4	12	65.8	13	68.8
3	6	52.7	7	56.9	8	61.0	9	65.0	10	68.9	11	72.4	12	75.8
4	5	57.8	6	62.1	7	66.3	8	70.4	9	74.4	10	78.2	11	81.8
5	4	61.2	5	65.6	6	69.9	7	74.1	8	78.2	9	82.2	10	86.0
6	3	63.2	4	67.7	5	72.1	6	76.4	7	80.6	8	84.7	9	88.7
7	2	64.0	3	68.6	4	73.1	5	77.5	6	81.8	7	86.0	8	90.1
8	1	64.5	2	68.8	3	73.4	4	77.9	5	*82.3*	6	*86.6*	7	90.8
9			1	68.8	2	73.1	3	77.7	4	82.2	5	*86.6*	6	*90.9*
10					1	72.8	2	77.1	3	81.7	4	86.2	5	90.6
11							1	76.5	2	80.8	3	85.4	4	89.9
12									1	80.0	2	84.3	3	88.9
13											1	83.3	2	87.6
14													1	86.4
15														

cultivation to inferior (free) land immediately the point of maximum average return on the superior land has been passed. Neither point of diminishing returns appears to have any very determinate relation to the economy of division of input between different grades of land.

TABLE VII

MAXIMUM TOTAL RETURNS

Total doses	Doses on A	Return on A	Doses on B	Return on B	Total return
15	9	66.8	6	24.1	90.9
14	9	66.8	5	19.8	86.6
14	8	62.5	6	24.1	86.6
13	8	62.5	5	19.8	82.3
12	12	78.0	—	—	—

In fact it can be shown, by the same kind of analysis used above, that once cultivation of a given piece of A-land has been started under condition of increasing incremental returns, it usually will not pay to resort to another equal area of A-land (land equally good) until the point of maximum average returns on the first piece has been passed, and passed some distance. Thus if we take two equally productive areas of land with returns schedule as in A-land, Table I, and construct a combination-returns table,[5] like Table III, we find that up to nine doses the return is higher if all input is devoted to one tract. With ten or more doses available, it will pay better to divide the input between the two tracts. All that this means is that enough input must be available to overcome the initial low returns before it will pay to bother with more land.[6] However, when this amount of input is available the most productive results are obtained by dividing the input equally between the two tracts. (This holds true only because the shapes of the returns curves on the two are assumed to be identical.) Whether the point of division is before or beyond the point of maximum average return depends on the amount of input available.

Our second question—Are there circumstances in which cultivation should be extended to B-land before the point of maximum average return is reached on A-land?—has already been answered, incidentally, in the affirmative. In Table III, based on Table I, we find that if 15 or 16 units of input are available it would pay better to put 9 or 10 of them on the B-land although we should not yet have reached the point of maximum average return on A. However, the most productive division carries us beyond P_a on A and we devote only 6 or 7 units of input to B. Again, in the case of two pieces of land, each of A grade, just considered, we find

[5] To save space this table is not reproduced here.

[6] See F. M. Taylor, *Principles of Economics*, 1921, pp. 139, 140.

that of ten doses, five should go to A, and five to A′, bringing neither up to P_a.

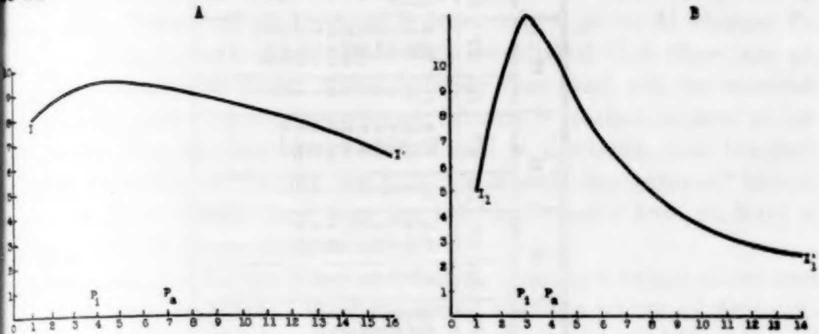

FIGURE 6
(The curves are for incremental returns.)

In order more clearly to test the answer to this question, consider curves of the types shown in Figure 6. Here land A shows great power to sustain intensive cultivation, while land B is flashy. Table VIII gives the primary data. Table IX shows the most advantageous distribution of any given total amount of input.

TABLE VIII

Land A				*Land B*			
Dose	Incremental return	Total return	Average return	Dose	Incremental return	Total return	Average return
1	8.0	8.0	8.0	1	5.0	5.0	5.0
2	8.6	16.6	8.3	2	9.4	14.4	7.2
3	9.2	25.8	8.6	3	12.0P_i'	26.4	8.8
4	9.5P_i	35.3	8.8	4	10.6	37.0	9.25P_a'
5	9.4	44.7	8.9	5	8.8	45.8	9.16
6	9.3	54.0	9.0	6	7.0	52.8	8.8
7	9.2	63.2	9.03P_a	7	5.8	58.6	8.4
8	9.0	72.2	9.0 +	8	5.0	63.6	8.0
9	8.8	81.0	9.0	9	4.3	67.9	7.5
10	8.6	89.6	8.96	10	3.7	71.6	7.2
11	8.3	97.9	8.9	11	3.3	74.9	6.8
12	8.0	105.9	8.8	12	3.0	77.9	6.5
13	7.6	113.5	8.7	13	2.6	80.5	6.2
14	7.3	120.8	8.6	14	2.5	83.0	5.9
15	6.8	127.6	8.5				
16	6.4	134.0	8.4 −				

Inspection of Table IX leads to the following conclusions: If only two doses are available they should all go to A. If 3, 4, or 5 doses are available they should all go to B. That is, in this range, B may be said to be the better land. If 6 or 7 doses are available they all go to A. With

TABLE IX
(Based on Table VIII)

Total Doses:→				2		3		4		5		6		7		8		9		10		11		12		13	
Doses on A	Average returns on A	Total returns on A	Total returns on B	D_b	CT	D_b	CT	D_b	CT	D_b	CT	D_b	CT	D_b	CT	D_b	CT	D_b	CT	D_b	CT	D_b	CT	D_b	CT	D_b	CT
1	8.0	8.0	5.0	1	13.0	2	22.4	3	34.4	4	45.0	5	53.8	6	60.8	7	66.6	8	71.6	9	75.9	10	79.6	11	82.9	12	85.9
2	8.3	16.6	14.4			1	21.6	2	31.0	3	43.0	4	53.6	5	62.4	6	69.4	7	75.2	8	80.2	9	84.5	10	88.2	11	91.5
3	8.6	25.8	26.4					1	30.8	2	40.2	3	52.2	4	62.8	5	71.6	6	78.6	7	84.4	8	89.4	9	93.7	10	97.4
4	P 8.8	35.3	37.0							1	40.3	2	49.7	3	61.7	4	*72.3*	5	81.1	6	88.1	7	93.9	8	98.9	9	103.2
5	8.9	44.7	45.8									1	49.7	2	59.1	3	71.1	4	*81.7*	5	90.5	6	97.5	7	103.3	8	108.3
6	9.0	54.0	52.8											1	59.0	2	68.4	3	80.4	4	*91.0*	5	99.8	6	106.8	7	112.6
7	P_a 9.03	63.2	58.6													1	68.2	2	77.6	3	89.6	4	*100.2*	5	109.0	6	116.0
8	9.0 +	72.2	63.6															1	77.2	2	86.6	3	98.6	4	*109.2*	5	*118.0*
9	9.0	81.0	67.9																	1	86.0	2	95.4	3	107.4	4	*118.0*
10	8.96	89.6	71.6																			1	94.6	2	104.0	3	116.0
11	8.9	97.9	74.9																					1	102.9	2	112.3
12	8.8	105.9	77.9																							1	110.9
13	8.7	113.5	80.5																								
14	8.6	120.8	83.0																								

with (say) three units of input comes in, this man can afford to pay the

8 or more doses (as far as the table and curves go), 4 doses will be allotted to B, the rest to A. The significant thing here, in answer to our question, is that while 7 doses all go to A, of 8 doses only 4 go to A, whereas P_a on A is at the seventh dose. It is thus established that there are at least some conditions under which inferior free land will be resorted to *before* the point of maximum average returns is reached on land of the best grade. The implication so often found in the texts, that the best land will be cultivated "up to the point of diminishing returns" before resort is had to inferior land does not hold universally true, at least if maximum average return is meant.

We come now to the third and fourth questions raised above and can answer them together. We have found that the points of diminishing returns (P_i and P_a) have no definite relation to the division of input between superior and inferior land when an initial stage of increasing returns is posited for each. It logically follows that the same indeterminate relation holds with regard to land rent, and that land rent, or at least a surplus or advantage comparable to land rent, may emerge for the superior land either before or not till long after the point of maximum average return (P_a) is reached on that land.

Here, again, amount of input available for division between the A-tract and the B-tract is of crucial importance. It can be laid down as fundamental that a newcomer cultivator, rather than resort to the inferior tract, will be willing to pay to the holder of the A-tract nearly the whole of the difference of return he could get by applying his (specific amount of) input to A over what he could get by applying it to B. This means that if all A-land is appropriated but all B-land still free, A-land will yield a rent notwithstanding that no B-land is cultivated. Thus if the owner of A-land does not care to cultivate it himself and a landless man

Table X

BASED ON TABLE I

Doses of input	Cost of input	Total return on A	Surplus over cost on A	Total return on B	Surplus over cost on B	Surplus on A less surplus on B
1	5	10.8	5.8	6.8	1.8	4.0
2	10	23.3	13.3	15.3	5.3	8.0
3	15	37.7	22.7	25.7	10.7	12.0
4	20	53.5	33.5	37.5	17.5	16.0
5	25	70.0	45.0	50.0	25.0	20.0
6	30	86.0	56.0	62.0	32.0	24.0
7	35	100.8	65.8	72.8	37.8	28.0
8	40	114.0	74.0	82.0	42.0	32.0
9	45	125.5	80.5	89.5	44.5	36.0
10	50	135.5	85.5	95.5	45.5	40.0
11	55	144.2	89.2	100.2	45.2	44.0
12	60	152.0	92.0	104.0	44.0	48.0

with (say) three units of input comes in, this man can afford to pay the owner of A-land anything up to just less than twelve units of product for the use of the A-tract (see Table X), and a larger amount if he has a larger input available.

With 12 doses of input, the newcomer can afford to pay nearly 48 for the use of A-tract, since A-land produces that much more than B-land for an input of 12 doses. But at 13 doses the scene changes slightly. According to Table III the most productive use of 13 doses is to put 5 on B and only 8 on A. Dividing input thus, the product is 164, while 13 doses, all put on B, give only 107. The difference, 57, may be exacted as rent on A. If for some reason all 13 doses had to be put either on A or on B, the rent on A would be only 52. We incidentally come to the paradoxical inference that the rent of land may be higher with a relatively low, rather than a relatively high, intensity of cultivation.

The foregoing analysis has proceeded on the assumption of an initial stage of increasing returns (in factoral proportion, not in time). Objections to the validity of any such assumption have been raised, on two grounds, by F. M. Taylor and F. L. Patton, respectively.

Taylor's theorem. Taylor, who, among non-mathematical economists, is one of the keenest analysts of costs and returns, holds that where all the factors are variable and divisible, all factors are used in the stage of diminishing returns.[7] He would say that the entire preceding analysis is beside the point. No land, in strict theory, he holds, will be cultivated in an initial stage of increasing or constant returns. If the cultivator finds himself getting such returns he will immediately increase his input not only up to the point of maximum incremental returns but beyond it to the point of maximum average returns. If he cannot increase his input, he will decrease the amount of land he cultivates until he has the optimum proportion of land and input. This is on the assumption, to repeat, that all factors are fluid and divisible without limit. Taylor does not claim universality for his theorem. There are factors which are not divisible.[8] Taylor uses as illustrations a furnace, and the Great Lakes. He would include mining, quarrying, and transportation as industries in which the theorem would not apply. He evidently thinks it generally true in agriculture.

It must be admitted that in pure static theory, Taylor's theorem is the result of precise and cogent reasoning; granting the assumptions on which it is based, it is unassailable. To the extent that the theorem is practically true, the economists who have recognized, even incidentally, an initial stage of increasing returns have been guilty of loose exposition. But it is a legitimate theoretical question how nearly a set of assumptions

[7] *Principles of Economics*, 1921, pp. 139, 140.
[8] *Ibid.*, pp. 141, 142.

This equipment cannot profitably be used on a small area of land. In

corresponds to real life. Measured by that standard, the assumption of an initial stage of increasing returns is probably much nearer reality than is Taylor's theorem.

We have taken land as the fixed, or constant, factor. Taylor would say that no matter how small our initial input is to be, we should choose so small an area of land that that input will yield the maximum return. To this there is the possible mathematical objection that if the input is minute the proper land area would be almost infinitesimal. The same objection would hold, however, even if we did not start with maximum incremental return. If the input approaches zero the output will approach zero, also, in either case. The question persists, Is there a limit to the smallness of land area we may reasonably assume on which to vary the input? Strict hedonistic theory demands (1) that we admit no motive save the economic motive and that we rule out the speculative appropriation of land; (2) that we admit no dynamic changes in method of applying inputs. To conform to these limitations, especially the latter, is not easy.

Not to reduce our unit of input to impossibly small dimensions, let us assume that a dose of input is a month's labor of a man with a hoe and a peck of seed. Put him to cultivating 100 acres and he will produce practically nothing. There you are, says Taylor's theorem. Of course he will not be fool enough to dissipate his energies thus. He will confine his cultivation to a few square rods, so that he will get the maximum product for his labor and seed. Only as you add other men with hoes and seed, each working at maximum efficiency, will the rest of the 100 acres be brought under cultivation. But let us consider our lone man on his quarter of an acre first. Is it so certain that he will produce the maximum product per unit of input—or that he will produce anything? He cannot work, or keep awake, twenty-four hours a day. While he sleeps wild animals may destroy his crop. Now suppose we add a second man. The crop is saved, and we have a pronounced case of increasing returns. Take another supposition. Suppose the land needs draining before a crop can be raised. One man cannot dig ditches for the whole 100 acres. Taylor's theorem would hold that he would drain only such area as he could cultivate at maximum advantage. But the quarter acre cannot be drained without draining the whole 100 acres. Again the conditions are those of increasing returns. The land is not divisible. We must deal with the 100 acres or none. This does not disprove Taylor's theorem. It simply is an agricultural situation to which that theorem does not apply.

We may invert the variables and constant and make capital and labor the constant, land the variable. Dry farming on western mesas is impracticable without large equipment in machinery, power, and labor.

experiments," due, no doubt, to the difficulty of accurate control. It

This equipment cannot profitably be used on a small area of land. In the preceding illustrations we had a large land area and a small input of labor and capital. Here we have a large constant of labor and capital and a small input of land. Taylor's theorem would demand that the labor and capital equipment be reduced to fit the small area of land. But this is impossible. To use the equipment on a small area would produce something (though possibly not expenses); to increase the land area will increase the product more than proportionally. Again we have increasing returns and an agricultural case to which Taylor's theorem does not apply.

These illustrations admit no non-economic motives and no dynamic changes, unless the coöperation of the two men in protecting the crop can be called a dynamic innovation. It is just the coöperation thus typified to which some writers attribute increasing returns.[9] It would be possible to enumerate contractual, legal, and psychological influences which cause men to appropriate more land than they can at once cultivate up to the point of diminishing returns, and hence to experience a stage of increasing returns. It is unnecessary to prolong the discussion, however; and we may turn to the other objection urged against the recognition of an initial stage of increasing returns in agriculture.

Lack of experimental evidence of increasing returns. F. L. Patton, in his Columbia doctoral dissertation, holds that there is little or no empirical evidence of an initial stage of increasing returns, though such returns may occur later, at fairly advanced stages of input.[10]

Patton's virtual denial of the existence of initial increasing returns is based upon no such theoretical assumptions as is Taylor's, but upon the records of certain experiment stations in Ohio, Pennsylvania, Utah, Kansas, and Arkansas. Negative generalizations are always hard to establish. Before acceptance is accorded Patton's inference, a more thorough canvass of experimental results should be made. Here and there appear bits of evidence of what looks much like an initial stage of increasing returns. For instance, Bulletin 230 of the South Carolina Experiment Station, *Farming for Profits*, by W. C. Jensen,[11] provides some tables which upon analysis show such a stage. Other tables show increasing returns at some later stage, as Patton admits may occur. As Spillman notes,[12] "there is a well-known variability of the results of field

[9] For example, Simon Newcomb, *Principles of Political Economy*, 1885, p. 242; Ely, *Outlines*, 1916, p. 389; A. S. Johnson, *Introduction*, 1922, p. 117; Edwin Cannan, *Wealth*, 1914, pp. 52, 53; Hugh Dalton, "The Theory of Population," *Economica*, March, 1928, pp. 36, 37.

[10] *Diminishing Returns in Agriculture*, Columbia University Studies in History, Economics and Public Law, no. 284, 1926, pp. 46 ff.

[11] Clemson College, S.C., June, 1926.

[12] W. J. Spillman and E. Lang, *The Law of Diminishing Returns*, 1924, p. 2.

TABLE XI

experiments," due, no doubt, to the difficulty of accurate control. It may be that in some degree the cases in which increasing returns appear after a stage of diminishing returns, are to be attributed to faulty technique or to conditions over which the experimenter has no control and the presence of which he may not know. There seems to be no *a priori* reason, however, for supposing that increasing returns might not set in after diminishing returns, even under the strictest control, though with continued additions of input diminishing returns must set in permanently sooner or later.[13] Be that as it may, the South Carolina Bulletin contains some interesting, though by no means conclusive, evidence of the actual occurrence of initial increasing returns. This bulletin, it should be noted, gives the results not of experiment-plot operations but of a survey of inputs and yields in actual farming operations. The clearest case of initial increasing returns is afforded by the unpublished results of a statistical analysis of cotton yields for various inputs of boll weevil poison on 97 farms in Sumter County, Georgia. The effects of factors other than the use of poison, we are told, were eliminated by multiple correlation. Unfortunately, the table of inputs and returns is not given, but the curve for the value of cotton produced per acre for different inputs of poison is distinctly an increasing returns curve, from the start, at no poison, up to 30 pounds of poison per acre.[14] The bulletin gives several tables relating to yields of cotton for various inputs of mixed fertilizer. The figures are the results of a survey on farms (ranging in number from 96 to 333) in the Anderson area in South Carolina in 1914, 1922, 1923, 1924, and 1925. The following table is of interest.[15] Unfortunately the bulletin does not give the returns on applications of less than 150 pounds. All the figures relate to additions of input and yields above 100 pounds of fertilizer. We therefore lack information on the really initial inputs and yields.

One hundred pounds was the lowest amount of mixed fertilizer applied on any of the farms included in the survey, no doubt because farm experience had shown that application of less amount was unprofitable. This in itself is indirect evidence of an initial stage of returns which, if not increasing, are certainly not diminishing. The table as it stands shows constant incremental returns up to the fourth dose, increasing incre-

[13] Marshall, *Principles*, 8th ed., 1920, p. 159, note, says that alternations of increasing and decreasing returns "are not very rare," but he cites no evidence from real life.

[14] *Op. cit.*, p. 39. The curve of returns gives for each amount of poison applied the value of the cotton in excess of the cost of the poison. As nearly as can be readily calculated from the graph, with cotton at 21 cents and poison at 13 cents a pound, the incremental returns in pounds of cotton run, 9, 11, 13, 15, 22, which is a beautiful example of increasing returns.

[15] From Table 35, p. 65 of the bulletin cited. The column of incremental increases has been calculated.

TABLE XI

Increases in pounds of fertilizer applied per acre above 100 pounds	Resulting increases in yield of lint cotton in pounds per acre.	Incremental increase
50	3	—
100	8	5
150	13	5
200	18	5
250	31	13
300	55	24
350	72	17
400	83	11
450	91	8
500	100	9
550	101	1
600	102	1
650	108	6
700	115	7
750	122	7
800	128	6
850	133	5
900	137	4

mental returns for the fifth and sixth doses, and regularly diminishing incremental returns up to application of 650 or 700 pounds. Thereafter there is a second cycle of increasing and decreasing incremental returns, which however is probably not very significant. Probably a small proportion of the farms applied the higher amounts of fertilizer. The table, it is true, does not strictly indicate initial increasing returns, but it does indicate that diminishing returns do not set in until the application of between 400 and 450 pounds of fertilizer.

Another table, for the results of varied applications of nitrate of soda, gives the following results: [16]

TABLE XII

Pounds of input per acre	Total yields, in pounds of lint cotton per acre	Incremental yields
40	13	—
60	18	5
80	22	4
100	27	5
120	34	7
140	40	6
160	47	7
180	49	2
200	50	1

[16] *Op. cit.*, p. 67.

that they start with too large an input and that the doses are made too

Here we have five pounds increase due to the second 20 pounds of fertilizer and four pounds due to the third. This indicates initial diminishing returns, if we bar out question as to what the increments would be at inputs of less than 40 pounds of fertilizer. But with an input of 100 pounds increasing returns appear.

Another South Carolina bulletin[17] offers interesting evidence of increasing returns when we take as the variable the number of acres per mule, which animal, here at least, is to be regarded as constant. The results are as follows:

TABLE XIII

Number of farms	Average number of crop acres per mule	Farm income per mule in dollars	Incremental return in dollars
Farms under 40 acres:			
13	8	85	—
57	13	88	3
46	17	106	18
14	24	162	56
Farms of 41–80 acres:			
20	11	42	—
39	18	71	29
26	23	87	16
11	31	236	149
Farms of 81 acres or more:			
4	11	12	—
17	18	87	75
18	23	152	65
17	32	246	94

These few citations do not, of course, disprove the contention that initial increasing returns on land in agriculture are rare. A thorough search through the experiment station records would probably reveal relatively few cases in which initial increasing returns appear. Their apparent rarity may be due to a variety of causes. As a matter of fact, experiment station data should be used with care. In the first place, as noted above, the accuracy of the experimentation is open to question. Secondly, while in strict theory, no dynamic element must be allowed to enter the analysis of factoral proportion in relation to output, in actual operations (to say nothing of abstract theory) it is extremely difficult to exclude such elements. Thirdly, the doses and the exact nature of the input are not always accurately defined. Such terms as "plowings" and "cultivations" are too indefinite. Finally, especially as concerns demonstrating the presence or absence of an initial stage of increasing returns in agriculture, the experimental data are very likely to be defective, in

[17] *Farm Organization and Cost of Production on Cotton Farms in Anderson County, S.C.*, South Carolina Agricultural Experiment Station, Bulletin 221, 1924, p. 88.

very small initial inputs, we have to fall back upon logic, and, as Patton

that they start with too large an input and that the doses are made too large.

Theorists should arrive at some agreement as the dividing line between static and dynamic factors in the analysis of returns. A reasonably sharp, but not too doctrinaire, distinction is particularly desirable in an application of the theory of returns to a study of the future of population increase and standards of living. To illustrate the methodological problem involved, take the question as to the form in which an additional dose of "capital and labor," or "expense" may be applied. If we start with a man and hoe, or a dollar's worth of labor applied by a man with a hoe, must we, to keep to the static assumption, keep on adding expense merely in the form of men with hoes? To change from hoes to horse-drawn harrows, and from harrows to tractor-drawn cultivators, is in one sense to admit dynamic elements. We are changing the form and the efficiency of a given input of energy. We are uniting energy with intelligence in varying proportions. Hence, in strictest logic, we are in the dynamic domain. But not to change from hoes to harrows at a certain stage in the input of expense is sheer lack of common sense; and an abstract analysis which succeeds in being formally static by refusing to admit the harrow, no matter how much expense is applied, will be lacking in realism. Not denying that such analyses should be made, because they help to clear our thought, we may question whether an analysis which admits the change from hoe to harrow should be regarded as out of court in the static theory of factoral proportions. To cling to hoes throughout a series of additions of expense of cultivation would undoubtedly reveal diminishing returns more quickly than would additions changing to more effective forms of applying energy. To change from hoes to harrows might bring increasing returns for a certain range of inputs of expense, and thus preclude a clear-cut presentation of a case of diminishing returns. Nevertheless, what we practically want to know is how returns behave when we apply our energy in forms rational and economical in the light of known technique. It would seem, therefore, that without undue liberty we may regard as static any experiment which employs recognized methods of cultivation, even though the form of the input of expense may change from the earlier to the later dose. This would certainly be permissible in a study of agricultural returns and population increase. The basic static problem of population would then be: What returns per capita can an increasing population get from a given equipment of natural resources utilized by present-known technique? That is essentially a question of static conditions. Admit, however, a new discovery, and the problem becomes dynamic.

Returning to the question of the size of doses of input and the failure of most of the empirical data to throw light on the behavior of yields for

may appear on a tract of the better land upon which cultivation has been started, even though there is equally good free land. Taking all the

very small initial inputs, we have to fall back upon logic, and, as Patton suggests, the opinions of soil theorists. The data studied by Spillman[18] showed initial increasing returns in only three cases. Spillman's geometrical progression formula for the law of diminishing increments leaves no room for an initial stage of increasing returns. Spillman is not unconscious of the fact, however, that such a stage might be revealed, had we data for smaller amounts of input.[19] On the whole it is not clear that the soil theorists have definite proof, one way or the other, to give us until more experimental work is completed. Experiments of the kind needed are not likely to be undertaken by the experiment stations, because the point involved is, for a settled country, more a theoretical than a practical question.

If, contrary to the assumption back of Taylor's theorem, we hold that the agriculturist often finds himself, from technological or contractual causes, in a position where he cannot choose at will the amount of land he will cultivate—if in other words we regard land as not invariably a divisible factor—logically the potential existence of an initial stage of increasing returns is difficult to question. If it does not exist the cultivator must invariably accomplish the task of hitting on the right scale of operations ("size of plant") and the right factoral proportion without preliminary trial—a supposition difficult to accept. Land in agricultural use, under a régime of private ownership and contract, simply is not as freely divisible as Taylor's theorem requires. That theorem must therefore be taken for what it is, a keen piece of pure theory, applicable in real life as far as men are alertly efficient in choosing size of operations and in ordering factoral proportion, and as far as they are not bound by contractual relations or driven by speculative motives which cause them to occupy more land than they have resources to work to the maximum advantage.

Theoretically, as farming is actually carried on in new countries, there must be an initial stage of increasing returns. In general to deny any such stage is to nullify the theory of overhead costs.

In conclusion, we may ask what modification in traditional rent doctrine is entailed by recognition of an initial stage of increasing returns. The required modifications are rather verbal than substantive, perhaps. It is hardly accurate to imply that poorer land will invariably be occupied as soon as diminishing returns are encountered on the better land. It may be good economy, on the other hand, to extend cultivation to the poorer land before the point of diminishing returns on the better land is reached. Finally, a surplus which, if not rent, is closely akin to rent,

[18] Spillman and Lang, *The Law of Diminishing Returns*, 1924, pp. 60, 61.

[19] See also the discussion of Baule's law, in Spillman and Lang, pp. 144 ff., and Patton's comments, *op. cit.*, p. 48.

may appear on a tract of the better land upon which cultivation has been started, even though there is equally good free land. Taking all the land, or all the known natural resources, of a country as the constant, the population may long be in a stage of increasing returns (all dynamic factors aside), while at the same time rent is being paid. From this broad point of view, at least, it may be questioned whether theory has not assumed a more invariable and certain relation between rent and diminishing returns than the facts entirely justify.

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1. Six cargo vessels, built in Australia, and known as the "D" class.
2. Thirteen cargo steamers, also built in Australia, and known as the "E" class.

THE SHIPPING ENTERPRISE OF THE AUSTRALIAN COMMONWEALTH GOVERNMENT, 1916-1928

I

In the year 1916, Australia was facing an emergency of very grave import. There was an acute shortage of Allied tonnage owing to the depredations of the German submarines. Australian wool and foodstuffs lay rotting or mice-infested on the wharves and public men and exporters alike saw, with dismay, that there was little prospect of lifting these commodities. In this crisis, the Prime Minister of the day (Mr. W. M. Hughes) resolved on a bold stroke. Without consulting Parliament, and exercising the greatest secrecy, he appeared in the English market with the intention of purchasing, on behalf of his government, thirty second-hand cargo vessels. He was partially successful only, being able to obtain fifteen vessels. English shipping interests were powerful enough to block the complete realization of his plans. Even after this purchase had been negotiated—the price was £2,050,000—Mr. Hughes met with an unexpected difficulty. The shipowners, in a final effort to defeat Mr. Hughes, attempted to have the vessels requisitioned by their government as war utilities as they came into port. The Australian prime minister, however, at that time enjoyed considerable influence with the British authorities, and this enabled him to frustrate the move of the shipping combine and to take delivery of his purchase. For his forethought and his shrewd and skillful handling of a particularly delicate negotiation, great credit is due to Mr. Hughes; that he has acquitted himself as a statesman of courage, men of all parties in Australia are now agreed.

The vessels were immediately entered upon the Australian register and traded with Great Britain under the name of the Commonwealth Government Line of Steamers. The ships—the nuclei of the Commonwealth Shipping Fleet—came to be known as the "Australs" to distinguish them from other types or classes of vessels subsequently added to the line. Two of these "Australs" were lost during the war, and two were sold during the year 1919. In addition eighteen vessels, which had been taken from the enemy during the war, were added to the Line, but one of these was lost at sea in 1920.

II

As part of its post-war reconstruction program, the government decided to enlarge its shipping activities, and the result was the addition of twenty-six new ships. These additions comprise the following four classes:

no more keels would be laid down. The House had voiced a clear opinion that after the completion of the ships then in course of construction,

1. Six cargo vessels, built in Australia, and known as the "D" class.

2. Thirteen cargo steamers, also built in Australia, and known as the "E" class.

3. Two cargo steamers, also built in Australia, known as the "Dale" class. These vessels were much greater in dimension than the ships of "D" and "E" class. They were 520 feet in length by a breadth of 63 feet, with a net registered tonnage of 5,800, and gross, approximately 9,700. Their sailing speed was fourteen and a half knots; but they could obtain a maximum of sixteen knots. The construction cost was £1,573,707.

4. Five passenger and cargo vessels, built in the United Kingdom, and known as the "Bay" class. These ships were of very modern design.

The total cost of construction of these vessels was £5,953,797. They were 530 feet in length and 68 feet broad; they had a deadweight capacity of approximately 12,590 tons and 350,000 cubic feet of insulated space. Their sailing speed was fourteen and a half knots, with a maximum of sixteen and a half knots, and they had accommodations for approximately 750 "one class" passengers.

At first, as the result of its operations, the Line showed a substantial profit. This was due in great measure to the high freight rates that then ruled. But the passing of war and immediate post-war conditions involved a decline in these rates because there was a surplus of tonnage in the world, and the Line's profits were soon converted into equally substantial losses. The story of the Canadian Government Mercantile Marine, Ltd., is much the same. When the exceptional circumstances arising out of the war ceased to be, profits faded into deficits. The following table shows, in summary form, the financial results of the Australian venture till August 31, 1923:

To June 30, 1917, profit	£ 426,394. 7. 4
To June 30, 1918, profit	905,879. 0. 6
To June 30, 1919, profit	1,284,598.11. 8
To June 30, 1920, profit	365,385.14.10
To June 30, 1921, profit	530,930.11.10
To June 30, 1922, loss	521,037.11. 9
To August 31, 1923, loss	1,051,997. 4.10

(These figures, it should be noted, do not take into account allowance for depreciation.)

As early as 1921, there had been considerable criticism throughout the country aimed at the operation of the Line; and, in November of that year, the government shipping and shipbuilding programs formed the subject of a keen debate in the House of Representatives. In closing the debate, the government announced, (a) that it would retain the Line but that it would recast the whole system of management and control; (b) that when its commitments for shipbuilding were exhausted,

tralian articles in comparison with those borne by competing overseas companies.

Accordingly the board disposed of all its vessels except the modern

no more keels would be laid down. The House had voiced a clear opinion that after the completion of the ships then in course of construction, shipbuilding should be left to private enterprise.

III

It was not till well on during the year 1923 that the government took definite steps to reorganize the scheme of management of the Line. In July of that year, it steered its Commonwealth Shipping bill through Parliament. By virtue of that legislation, the management of the Line was to be vested in a Board of Directors which should number not less than three nor more than five members. The Act came into force by proclamation on September 1, 1923; and a board consisting of three directors took office as from that date. The primary object of the measure that placed the fleet under the control of an independent board was the elimination of political interference in the management. It was confidently hoped that, worked on a purely business basis, profits would once again be the order of the day.

The board, on its constitution, took over, from the government, fifty steamers. These comprised the eleven remaining "Australs," seventeen ex-enemy vessels, six ships of the "D" class, and eleven of the "E" class, as well as the five "Bays." In addition, two vessels of the "E" class and the two "Dales," then in course of construction, were to be handed over to the board on completion. The transfer value of these fifty-four vessels (including gear, spare gear, apparel, tackle, furniture, stores, and equipment) was fixed at £4,718,150; and for this sum the board gave the Commonwealth Treasury a debenture bearing interest at the rate of five pounds per centum per annum. Office fittings and furniture were set down at £7,500. Now the book value of these ships was £12,716,800, so that, on their re-assessment when taken over by the board, the value-figure was written down considerably.

The board was quick to realize that forty-seven of the vessels—all except the "Dales" and the "Bays"—could not be run with any expectancy of profit. They were unsuitable for the following reasons:

1. The majority were too small and slow for the requirements of overseas trade. In the case of those that did not transgress in this respect, the boilers, hulls, and machinery were found to have deteriorated to an extent that impaired their efficiency. This deterioration was due not so much to neglect as to the force of circumstances; these ships had been, for the most part, exploited to the utmost to meet the exigencies arising out of the war, leaving little opportunity for their repair and overhauling.

2. The high costs of manning and provisioning the ships under Aus-

the country by its existence as a governmental concern are more than outweighed by the heavy losses already sustained, and which, it must

tralian articles in comparison with those borne by competing overseas companies.

Accordingly the board disposed of all its vessels except the modern ships known as the "Dales" and the "Bays." The "Bays" were kept on the London route, and the "Dales" were placed on service to the west coast of England. Later, however, when the west coast traffic showed disappointing returns, this service was discontinued, and the whole Line then ran to London.

The operations of the Line under the Shipping Board régime showed a loss for each year. The following table sets out the figures to March 31, 1928:

Sept. 1, 1923, to March 31, 1924, loss	£245,474.10. 6
April 1, 1924, to March 31, 1925, loss	593,879. 9.11
April 1, 1925, to March 31, 1926, loss	503,076.16.11
April 1, 1926, to March 31, 1927, loss	595,833.10. 7
April 1, 1927, to March 31, 1928, loss	593,075. 7. 6

(The figures showing sundry expenses since March 31, 1928, are not yet available in a satisfactory form.)

It should be noted that the figures in the above table make allowance for administrative expenses, depreciation costs, and interest charges.

Early in 1925, the Prime Minister (Mr. Bruce) decided to dispose of the ships remaining in the Line. The Shipping Board had reported adversely on the prospects of the Line, holding out little hope of operating the ships on a profitable basis so long as they were upon the Australian register and were covered by Australian industrial awards. Running costs, in comparison with those of competitors from overseas, were still very high; and the Line was being grievously hampered by industrial troubles. No definite tender, however, was lodged in response to the advertisements for sale, and the running was continued.

IV

The continued financial non-success of the Line kept the question of sale prominently before the public mind. Even with a formidable strike gravely impending the rival British companies, the loss for the year 1925-26 exceeded half a million pounds sterling. The Joint Committee of Parliament of Public Accounts was deputed to examine afresh into the Commonwealth Government shipping activities; and on September 28, 1927, it presented a report embodying its final conclusions. In the course of its investigations, the committee examined forty-six persons. These included the chairman and members of the Shipping Board, the principal officers of the Line, as well as representative exporters, merchants, and passengers. It confessed that the "expectations of Parliament when it passed the Shipping act in 1923 have been far from realized." It considered that "the benefits now accruing to

the country by its existence as a governmental concern are more than outweighed by the heavy losses already sustained, and which, it must be reluctantly admitted, are likely to continue." It recorded its recommendation—by a substantial majority—that "having regard to all the circumstances . . . . the Australian Commonwealth Line of Steamers should not be retained as a direct governmental activity." While recognizing the invaluable services rendered to Australia during the war and in the days immediately subsequent, it advised that the Line should be disposed of "in a manner that would preserve to Australia the good effects it has exercised in the preservation of reasonable freights and fares between Australia and the United Kingdom." Gigantic companies—the result of integration, amalgamation or cartel arrangement—are a feature of the present industrial age, and nations, in defense of vital interests, deem it necessary to have some material interest in the sea carriage of their passengers and goods. In the United States and in Canada, as in Australia, shipping, as a direct governmental utility, has not proved a financial success, and governments are more and more inclined to meet the situation by lending support to or subsidizing a particular company or companies; thus Great Britain—the Cunard Line; France—Messageries Maritimes; Germany—Nord Deutscher Lloyd; Italy—Lloyd Sabaudo; and Holland with its Royal Packet Services. The committee hoped that Australia would see the wisdom of taking unto herself in like manner an organization privately owned and favor it with mail contracts, the carriage of government goods and material, and the transport of assisted immigrants to the Commonwealth. The Commonwealth Bank of Australia (which is a government concern) might, too, be prepared to grant accommodation upon generous terms to a company so placed, and, in return, guarantees might be obtained that should prove a reasonable safeguard to Australian trade.

Accordingly, once again the Ministry announced its willingness to sell its ships, but with this reservation—that tenders would be accepted only from natural born British subjects or from companies that could provide assurances that they would remain under the control of British subjects. It also indicated (a) that it would require, for a period of not less than ten years, the maintenance of a service at least equivalent, in point of size, speed and class, to that which was then being given by the "Bays" and "Dales." The vessels should have at least equal accommodation for passengers and refrigerating and other cargo space as was then made available by the Line; (b) that it would grant a preference to a tenderer who submitted proposals safeguarding shippers to and from Australia in regard to freight rates and who made definite proposals to extend the service beyond that maintained by the Line.

V

It was believed in shipping circles that no offer would be forthcoming under such stringent conditions—particularly that in regard to the guarantee of a ten years' service. Expectations, however, were belied, for three tenders were received. They were from or on behalf of the following: (1) The White Star Line, a company with a capital amounting to £9,000,000. This capital is made up of £5,000,000, represented by preference shares, practically all of which is held by British subjects, and ordinary shares to the value of £4,000,000, which are held in Great Britain. (2) Australian Commonwealth Shipping Company, a company to be formed for the acquisition of the Line, should the tender be successful. (3) Runciman London, Ltd., a company which also was to be formed.

That of the White Star Line was, in all major respects, the most favorable to the vendor; and, in April, 1928, the government signed a contract of sale with this tenderer. The purchase price was £1,900,000. Of this, cash payments represented £250,000, payable in *pro rata* sums on the delivery of each steamer to the company. The balance of purchase money is payable in ten equal yearly instalments thereafter, bearing interest at the rate of $5\frac{1}{2}$ per centum per annum. This balance of purchase money is secured by a debenture constituting a first floating charge over the ships and the assets of this particular portion of the company's business. The company has undertaken not to make a general increase in homeward freights without reference to a responsible body in Australia representing all interests concerned. A board—on the composition of which the government and the company will have to agree—has not yet been created for this purpose. The company has also undertaken to inaugurate a supplementary fortnightly service to Suez with extra vessels should trade justify this venture. The company has taken over insurance policies, unbroached stores, fuel oil on board in the usual way, and has, in terms of its contract, assisted the Commonwealth Government to repatriate the crews from Great Britain. It has also undertaken to retain as many of the officers and engineers of the Line as is practicable and to find employment for the seamen, provided that they are deemed suitable. The government, on its part, has agreed to accord the same favorable treatment to the company as has been enjoyed by the Line. This, in practice, means that the company will have preference in regard to the carrying of government cargo so long as there be a ship available, and provided that the freight rate be the best that is obtainable. This, it should be noted, was the only privilege granted by the government to the Line as against its competitors.

The offer made on behalf of the Australian Commonwealth Shipping

Company was for £1,575,000. Of this, £75,000 was payable in cash on the signing of a contract, and the balance was to take the form of ordinary shares or alternatively £950,000 in ordinary shares and £550,000 in 5 per cent preferred ordinary shares in the company which it was proposed to form. Within five years, the company was to build and place upon the Australian route, six steamers of 24,000 tonnage capable of sailing twenty-two knots, or as an alternative at the purchaser's option, within two years to construct and place on the service from three to eight steamers steaming eighteen knots. This meant, of course, that ordinary shares would not carry dividends until at least the enlarged fleet (consisting of twenty-two knot or eighteen-knot vessels) was placed in commission.

The tender on behalf of Runciman London, Ltd., was for £1,250,000. The terms of payment were as follows: £500,000 in cash, and £750,000 in debentures bearing interest at the rate of $5\frac{1}{2}$ per centum per annum, redeemable from a sinking fund of not less than 3 per centum per annum. The company was prepared to pay £100,000 cash on signing an agreement, £40,000 in cash and £80,000 in debentures on taking over the first vessel, and £60,000 in cash and £70,000 in debentures on taking over each subsequent steamer.

It is unnecessary to examine other conditions and stipulations attaching to the tenders of the Australian Commonwealth Shipping Company and Runciman London, Ltd. They compare unfavorably, in general, with those of the White Star Company. The chairman of the Commonwealth Shipping Board (Mr. Larkin) estimated that £2,000,000 was a fair price for the ships, so that, taking into account the accompanying undertakings, the Ministry had reason to regard the tender of the White Star Line a reasonable one in the circumstances.

VI

The reasons for the financial failure of the "Bays" and "Dales" may now be summarized as follows:

(1) Running costs. Under Australian articles these work out heavy in comparison with those under which overseas competitors sail. Taking Australian wages as £100, it was estimated late in 1927 that in respect of a vessel of 6,000 tons gross, British wages would be £32.41, American £42.21, Swedish £24.51, and Danish £15.44. Since that date, Australian rates have been increased, so that the comparison goes even more now against Australia. A "Bay" steamer carried a complement of 170 men; and the running cost (including over-time and leave allowance) amounted to £3,725 per month. A vessel of a similar class on the British register is manned by 154 men only; and the corresponding monthly cost is £1,654.

(2) Administrative expenses. Including rent, these totaled, for the year 1926-27, the sum of £90,145. Salaries of 144 males and 53 females accounted for £64,298 of this. Certainly the rate of pay for many of the officials was lower than that for corresponding posts in private shipping companies, but the staff did not decrease in proportion as the ships (other than the "Bays" and "Dales") were disposed of. A total exceeding £90,000 per annum is obviously a very heavy burden for seven ships to carry.

(3) Dissension and disagreement in the management. Harmful results must surely have come from the varying views that members of the Shipping Board held on matters of policy. The Parliamentary Committee, in its report, deplored this lack of a sympathetic relationship, describing the board as "expensive and inharmonious."

(4) Difficulties in obtaining cargo. Because of the abundant tonnage available between the United Kingdom and Australia, the ships rarely ran with full holds. The action, too, of the government in calling for tenders for sale in the year 1925 shrouded the Line's future with uncertainty. and this uncertainty undoubtedly lost to the Line the business of many of its regular shippers.

(5) Industrial troubles on the waterfront. The Line was singularly unfortunate in the treatment that it received at the hands of the maritime unions—notably cooks, stewards, and seamen. Continual stoppages of work and hold-ups whose object was the establishment of "job-control" form a feature of the Line's history. The Line was the headquarters of the strife that tormented the Australian waterfront. The press did little to help matters; it eagerly gave prominence to the embarrassments and difficulties which confronted the Line while glossing over similar experiences of British companies.

VII

When it became known that the Ministry had made up its mind once more to dispose of the ships, a bitter opposition was developed and directed by the Labor party. This agitation culminated in a motion of censure in Parliament, which, however, was easily defeated on a party vote. The White Star Company had, before placing its tender, inquired whether the government was willing to indemnify a purchaser against losses through industrial trouble, but the reply had been in the negative. When it was rumored that the company was the successful tenderer, the Maritime Transport Group in Sydney threatened to declare "black" all White Star Line vessels that should visit Australia. They would not handle a "stick of cargo," and "not even a line will be touched" when the company's vessels are berthing. The Prime Minister depre-

cated such language in severe terms and issued to the unions a solemn warning. "If such an attempt is made," he said, "the government will use every means within its power to ensure that the will of the people is not thwarted. Should we find that we have not sufficient powers, the government will bring down to the House any necessary measure required to deal with the position."

Adverting to this opposition to the Ministry's decision to sell, it may be of interest briefly to state the case for the retention of the ships and how or to what extent, that case may be rebutted. Now, the value of the Line of Australia may be considered from three distinct angles:

(a) As a national safeguard and as an aid to the mercantile marine. The "Bays" were built under British naval supervision, they have specially constructed bulwarks and decks and can mount eight six-inch guns. The "Dales," too, can carry heavy armament and may readily be converted into auxiliary cruisers, commerce destroyers or transports. The total sea-going personnel of the Line in its latter days was 1,034. Of these, 197 were officers and 837 were members of the crews, victualling or engine-room staffs. Of the 197 officers, 149 were domiciled in Australia and 48 in the United Kingdom. Of the 837 members of the crews, etc., 472 were domiciled in the United Kingdom and 365 in Australia. The fact that a majority of the personnel—520 in number—was domiciled in the United Kingdom is to some extent accounted for by the fact that the Line had a longer stay at the terminal port of London than in any Australian harbor. It is certainly difficult to regard the maintenance of an Australian mercantile marine numbering 514 men only, as a sufficient *quid pro quo* for the heavy losses sustained by the Line unless there be grounds for believing that there will be substantial reductions at least in these losses in the near future. The contention, however, that the ships have a potential war utility is a very serious one, but, of course, it is too indefinite to be reduced to monetary values so that it may be weighed wholly or partially against losses incurred by the Line. And it should be remembered that the ships, in passing to a British purchaser, will not be unavailable as a protection to Australia. Very possibly it is a preferable policy, in the case of a young country like Australia, to invest resources set apart for naval defense in vessels which are professionally engines of war, and to keep trade considerations rigidly apart.

(b) As a commercial proposition. Figures have been adduced to show that, since the Shipping Board was established, the losses steadily increased.[1] But shipping has, throughout the greater part of the world,

[1] See table, page 608.

been passing through a phase of depression. At a conference recently held in Sydney between representatives of Australian producers and overseas shipping interests and a delegation of British shipowners, an audited statement was issued by the British delegation disclosing that heavy losses had been incurred during the years 1926-1928 by the British cargo and cargo-passenger lines that were trading regularly with Australia. But the report presented to the annual meeting of the Chamber of Shipping of the United Kingdom, while dwelling on the disappointments of the year 1928, holds out distinct hopes of improved conditions for the year 1929. Having regard to this report and to the figures submitted to the Sydney conference by the British delegation, it may be contended that a great deal of reliance should not be placed on the losses suffered by the Commonwealth Government Line of Steamers in its last years, and that these figures should not be allowed to form the foundation of an argument justifying their sale. Efficiently managed, the ships might have, in the future, realized profits and thus leeway might have been made up. But the chairman of the Shipping Board has stated emphatically that it was impossible to manage the Line on a purely business basis; political influence could not altogether be excluded. This assurance, coming from such a quarter, may well offset the contention that, directed upon businesslike methods, the Line would be a source of financial gain to the people of Australia when brighter days should dawn upon the shipping world. Heavy expenses, too, are looming on the horizon, for the ships will soon be in need of extensive overhauling and refitting, and, if the services are to be maintained to schedule, new units will have to be added. The ships themselves have not a very long life remaining to them, as the day of the Diesel engine and the engine driven by super-heated steam is rapidly approaching. So unpromising was the outlook that, in the opinion of the chairman, even under the advantages of the British register the commercial prospects of these ships are exceedingly doubtful. Lord Kylsant of the White Star Line, to some extent corroborates this view in admitting that he negotiated the purchase, not so much to obtain the ships as the organization itself. The earning capacity of the ships, however, should be increased when the Ministry redeems its promise to repeal the coastal clauses of the Commonwealth Navigation act, thereby removing the ban that at present keeps overseas vessels from a share in the interstate trade. By carrying interstate passengers, overseas companies should enhance their returns agreeably; cargo shipments on the coast, however, will probably not be affected in any considerable degree, as the ships will find it better business to hold to strict schedule sailing times.

(c) As a safeguard against increased fares and freights, and the

fostering of the Australian shipping industry. It may be said that the financial losses are atoned for—or partially atoned for—by advantages of a negative nature that accrue to the Australian primary producer. The financial losses may be viewed as a price or subsidy to benefit an important section of the community—the exporters; they may be read as a bonus expended to protect the primary producers against the unreasonable raising of freights by the Ovearseas Shipping Combine, comprising, as it does, no less than twenty large shipping concerns. Apparent losses may be mere book debits; they may be more than countered or balanced by indirect and invisible gains. For the financial year 1926-1927, the Commonwealth Railways incurred a deficit of approximately £425,000; the answer to this is to be found in the furtherance of a sound development policy. For the year, 1927-1928, the Commonwealth Government expended, in the form of bounties and rebates, the sum of £891,143 to encourage the industries of wire-netting, galvanized sheets, fencing wire, tractors, wine, cotton-seed, cotton-yarn and sulphur. Surely some assistance ought to be forthcoming from the Treasury of an avowed Protectionist country to foster a shipping industry, that would pay good wages and maintain the high Australian standard of living. The fact that the British Shipping Combine at the close of last year announced its intention of increasing freight rates from Great Britain to Australia by an average of ten per cent—and this was interpreted as but the prelude to a similar increase in rates from Australia to Great Britain—goes to show that the fears entertained as the result of the sale of the Line were, in this respect, far from imaginary.

But the cost—as expressed in the huge losses incurred in the venture—seems exorbitant when interpreted as a tariff duty to protect the shipping industry. The other argument—that in regard to the safeguarding of fares and freights—is much more convincing. From a study of Australia's post-war history it is abundantly clear that the presence of the Line has had some influence in reducing freights and preventing their rise. But that influence has probably been exaggerated, for the business dealings of the Line were not so extensive as has sometimes been said. An analysis of the figure of the cargoes shipped to the United Kingdom during the year 1926-1927 shows that approximately 2.7 per cent only was carried by the "Bays" and "Dales." These bottoms handled about 1.2 per cent only of the wheat export and about 3 per cent only of the wool; and wool and wheat, it is material to add, represent about 45 per cent of the total Australian exports. Other figures are—flour, 5.7 per cent; beef, 2.6 per cent, mutton, 12.9 per cent; lamb, 12.1 per cent. Again, the British Combine does not, consequent upon the withdrawal of the Commonwealth Government from the trade, enjoy a monopoly on the Australian coast. There are foreign

companies to be considered, and they are growing in their Australian connection, as the following table serves to illustrate.

	Year	Number of ships	Net tonnage
Norway	1919	50	93,890
	1926	94	264,037
Holland	1919	29	69,280
	1926	35	124,824
Germany	1923	19	44,666
	1926	24	76,650

The foreign companies show little disposition to work hand in glove with the British Combine; they are eager to "cut in" on the Australian trade. That the British ship-owners agreed to suspend operation of their increases in freight rates to Australia pending a conference with representatives of Australian shipping interests and primary producers may be due, in some measure at least, to the refusal of Messageries Maritimes to observe the new schedule of charges and to the doubts entertained concerning the attitude of other Continental companies.[2] As regards freights outward from Australia, it will be remembered, too, that one British company—the White Star Line—is under contract not to raise these without reference to Australian interests.[3]

It has been suggested that the losses in running the Line could have been substantially reduced in one or more of the following ways—(1) By assigning to it the contract for the carriage of Australian mails outward. This contract, under which the Commonwealth Government pays £130,000 per annum, is now held by the Orient Royal Mail Company. (2) By the Commonwealth Shipping Board taking a share in the coastal cargo trade. But the fleet was too small in numbers to conduct a regular mail service to Great Britain, and the Shipping Board, upon investigation, had found it inadvisable to participate in the interstate traffic (except as to the carriage of meat from Queensland to Western Australia), because it would have seriously interfered with the overseas itineraries of the ships. Another suggestion put forward to curtail the losses of the Line was that the management should endeavor to capture lost markets in Great Britain and Europe, thereby swelling its own accommodation bookings. These markets had been successfully invaded by the Argentine chilled beef exporters to the detriment of Australian frozen meat. There are experts who believe that the "Bays"

[2] This conference, held at Sydney in April, 1929, has submitted a report to the Federal Ministry. The report, *inter alia,* advises that if further increases in freight rates on the Australian route are to be avoided, greater economies will have to be effected, *e.g.,* by a rationalization of services, the lowering of port dues and harbor charges, and the remission of certain taxation. An announcement of the Ministry's intentions is awaited. There the matter now stands.

[3] See page 610.

and the "Dales" are admirably adapted to the chilled beef trade; their decks are suitable, they are fitted with a brine circulation system, they are installed with fans, they have high speed and they have been kept to fixed dates of sailing. With a comparatively small expenditure they estimate that the ships can be fitted and equipped with the latest appliances and requisites for the chilled meat traffic. But this proposition did not commend itself to the government's advisers, so that the Ministry was cognizant of these possibilities when, in the language of the Parliamentary Joint Committee Report, it relieved itself "of a task which the world's experience has proved is beyond the power of any government to carry out efficiently."

VIII

And so ended a socialistic enterprise that proved of inestimable value to the country in circumstances of an extraordinary and emergency character, but which, on the restoration of times normal, rapidly outgrew its usefulness. It forms one of the most interesting chapters in Australian history, and a full appreciation of this experience goes far to support Gladstone's dictum that the business of government is to govern, not trade. The majority of Australians are glad to be quit of the venture—the total cash loss to the Treasury over the years 1916-1928 was £7,967,236.12.4d.— and the government will take comfort in the very pertinent remarks of the British Economic Mission. The members of this Mission were, at the request of the Commonwealth Government, nominated by the British Government, and are men of high business standing in the United Kingdom. They visited Australia and, after a thorough study, on January 7 of this year, published their report. This report is of considerable value to students of the economic condition of Australia; it may be said to constitute a stock-taking of the country. Paragraph 27 of that report reads: "The sphere of government activity in Australia must, in any case, be large, and things have gone too far for us to discuss today such matters as the construction of railways or works for the conservation and distribution of water by private enterprise. But a very wide field remains open which Australian Governments have, to a great extent, entered, and here we think that these Governments would be wise to go no further. Within this field we think that private enterprise, with no public purse to fall back upon in the event of failure, exposed to no political pressure to embark upon unprofitable courses, and stimulated by the hope to gain to the maximum of economy and efficiency, would produce results more beneficial to Australia as a whole than the present system is calculated to yield. Progress might indeed be slower than in the case of successful

government action, but it would be more sure, and the risks of loss and failure which entail not progress but regression would be greatly diminished."

Australia certainly is a peculiar case. She is "the only example in the world of one people possessing and controlling an island continent," she has a very high standard of living, she is heavily indebted abroad—she is "mortgaged," by virtue of her loans, to an equivalence of approximately 20 per cent of her assets—and her exports which are seasonal in nature, consist almost entirely of primary products. Her principal market is the far-off United Kingdom, and to reach that market, great ocean distances must be traversed, barren, to a great extent, in intermediary ports of call. Thus an adequately fast tonnage of a modern type, regular in sailings and asking the lowest possible rates of freight, is essential to her economic health. But there is little reason to believe that she will be better off, in respect of this, by the action of her own government in entering the lists as a direct trader.

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SHARING EARNINGS OF RESERVE BANKS

Among other questions having to do with the Federal Reserve System, the disposition of net earnings is again coming forward for discussion. The *Bankers Magazine* for June, 1929, alleged that the "member banks . . . . are discontented with the small percentage of the profits they have received." A Richmond banker, speaking at the recent convention of the West Virginia Bankers Association, in discussing this subject said, "A reasonable distribution of profits when earned is not only fair and just, but it would make membership in the system attractive and remove the chief cause for lack of growth. . . . . The plan of distribution should be entirely reversed—the bank shareholders are entitled to the large proportion of the earnings of the reserve institutions."

The original Federal Reserve act provided that member bank stockholders should be entitled to a 6 per cent cumulative dividend upon their shares and that net earnings over and above that, after the accumulation of a surplus of 40 per cent of paid-in capital, should be paid to the United States government as a franchise tax. The federal reserve banks were not intended to be profit-making institutions and it was seriously doubted whether their earnings would be substantial enough to meet even the 6 per cent dividend payment. Indeed, in the early years prior to the war, earnings were not great; and in some cases dividends were made possible "only by counting every possible source of enhancement of assets, by spreading out their organization expense over a considerable period, and by otherwise giving themselves the advantage of all doubts."

The early belief that reserve bank earnings would be negligible was so widespread that very early in the history of the System serious proposals were advanced to return to the member bank stockholders the contributions to reserve bank capital which they had made.

The war years brought to the reserve banks a greatly increased volume of business with correspondingly greater earnings. The 40 per cent surplus permitted by law became a reality. New buildings for the federal reserve banks and their branches began to absorb some of the earnings which would otherwise have gone to the government. Then there developed a feeling that the reserve banks should be permitted to build up larger surpluses. Justifications advanced in congressional debate were, first, that it was inadvisable to have so great a proportion of capital and surplus in fixed assets as was now the case with those federal reserve banks which had constructed costly buildings, and, second, that foreign banks and bankers in dealing with the reserve banks measured strength by the size of capital and surplus. Perhaps

another reason not voiced in the halls of Congress was the desire to postpone as long as possible the payment of substantial sums to the government in the form of a franchise tax. In addition, of course, the value and necessity of a substantial surplus were recognized.

Accordingly by the amendment of March 3, 1919, the reserve banks were permitted, after the payment of the annual dividend of 6 per cent on paid-in capital stock, to accumulate a surplus of 100 per cent of subscribed capital stock; after that net earnings were to be distributed 10 per cent to surplus and 90 per cent to the United States government as a franchise tax. It will be recalled that member banks subscribe to the capital stock of their regional reserve bank in an amount equal to 6 per cent of their paid-up capital stock and surplus, but that only half of their subscriptions have been called for. The change from 40 per cent of paid-in capital to 100 per cent of subscribed was accordingly a substantial increase.

The distribution of earnings authorized by the amendment of March 3, 1919, was made retroactively applicable to 1918 earnings. The result was that whereas out of 1917 earnings $1,134,234, had been transferred to surplus and a like amount paid to the United States government as a franchise tax, out of 1918 earnings, $48,334,341, was transferred to surplus and nothing paid to the United States government as a franchise tax. Since 1918, $205,429,777 has been transferred to surplus and $141,692,109 has been paid to the government. The fol-

	Earnings		Disposition of Net Earnings			
Federal Reserve Banks	Gross	Net	Dividends paid	Transferred to surplus*	Franchise tax paid to U. S. gov't.*	Profit (+) or loss (−) carried forward
	(000 omitted)	(000 omitted)	(000 omitted)	(000 omitted)	(000 omitted)	(000 omitted)
1914–15	$2,173	−$141	$217			−$350
1916	5,218	2,751	1,743			+1,008
1917	16,128	9,580	6,802	$1,134	$1,134	+509
1918	67,584	52,716	5,541	48,334		−1,159
1919	102,381	78,368	5,012	70,652	2,704	
1920	181,297	149,295	5,654	82,916	60,725	
1921	122,866	82,087	6,120	15,993	59,974	
1922	50,499	16,498	6,307	−660	10,851	
1923	50,709	12,711	6,553	2,546	3,613	
1924	38,340	3,718	6,682	−3,078	114	
1925	41,801	9,499	6,916	2,474	59	
1926	47,600	16,612	7,329	8,464	818	
1927	43,024	13,048	7,755	5,044	250	
1928	64,053	32,122	8,458	21,079	2,585	
Total	$833,673	$478,8	$81,089	$254,898	$142,827	

* Amount paid as franchise tax for 1922 included additional franchise tax payments for prior years withdrawn from surplus account on December 31, 1920, $270,389; for 1921, $3,129,673.

lowing table gives for all federal reserve banks the gross and net earnings and the disposition made of net earnings for the period 1914-1928.

While the New York Federal Reserve Bank has the record for the highest amount paid to the United States government as a franchise tax, it has not made any such payment since 1923; and to the Minneapolis bank must go the credit for the steadiest contribution to the federal government. It has made payments on account of franchise tax in ten out of fourteen years of operation and has not missed a year since 1920. On the other hand the Federal Reserve Bank of Dallas made its first contribution to the franchise tax out of 1928 earnings. In 1922, eleven of the banks made franchise tax payments; in 1923, ten; in 1928, six.

As of January 2, 1929, the capital and surplus figures of the federal reserve banks stood as follows:

Bank	*Paid-in capital* (000 omitted)	*Earned surplus* (000 omitted)
Boston	$ 10,156	$ 19,619
New York	50,124	71,282
Philadelphia	14,536	24,101
Cleveland	14,419	26,845
Richmond	6,142	12,399
Atlanta	5,239	10,554
Chicago	18,478	36,442
St. Louis	5,416	10,820
Minneapolis	3,021	7,082
Kansas City	4,224	9,086
Dallas	4,329	8,690
San Francisco	10,868	17,978
All 12 banks	146,952	252,398

From this table it can be seen that the only federal reserve banks which now have an accumulated surplus of 100 per cent of subscribed capital (or 200 per cent of paid-in capital) are Richmond, Atlanta, Minneapolis, Kansas City, and Dallas. Boston, Chicago and St. Louis are very close to the mark. Unless these banks have substantial capital increases either from new members, increase in capital stock and surplus of present members or a "call" for part or all of subscribed reserve bank capital to be paid in, the major portion (90 per cent) of their net earnings after the 6 per cent dividend payment from now on will go to the United States government as a franchise tax if the present legal provisions remain undisturbed. On the other hand, it would appear that some few years may elapse before the Federal Reserve Bank of New York will make any contribution whatever to the government.

It is interesting to note that the surplus of all twelve federal reserve banks combined is only about 86 per cent of total subscribed capital stock. If we are to consider the Federal Reserve System as a unit and to have regard for the strength of the System rather than the strength

of individual banks, there might be some warrant for urging that those banks which have already reached a surplus equal to 100 per cent subscribed capital stock should pay their excess earnings into the surplus accounts of the other reserve banks rather than paying them to the government.

These figures make interesting a recent legislative proposal which, according to rumor, is likely to be again brought forward in the coming Congress. The Senate Bill 5723, introduced in the second session of the 70th Congress by Senator Carter Glass of Virginia, proposed to alter Section 7 of the Federal Reserve act relating to the earnings of member banks to read as follows:

Section 7. After all necessary expenses of a federal reserve bank shall have been paid or provided for, the stockholders shall be entitled to receive an annual dividend of 6 per centum on the paid-in capital stock, which dividend shall be cumulative. After the aforesaid dividend claims have been fully met the net earnings, beginning with the earnings for the year ending December 31, 1929, shall be distributed as follows: Twenty-five per centum of such net earnings shall be paid to the United States as a franchise tax; 25 per centum of such net earnings shall be paid into the surplus fund of such bank: Provided, however, that no such payment shall be made into such surplus fund in excess of an amount sufficient to make the entire surplus fund equal to the amount of the subscribed capital stock of such bank, and that any part of such 25 per centum which is not needed to bring such surplus fund up to 100 per centum of such subscribed capital stock shall be paid to the United States as additional franchise tax; and the remaining 50 per centum of such net earnings shall be paid at the end of each calendar year to the stockholders on a *pro rata* distribution to be made in accordance with such rules and regulations as may be prescribed by the Federal Reserve Board.

This proposed amendment does not stipulate the method of distribution of surplus earnings to member banks. It leaves that to the determination of the Federal Reserve Board. The two methods which have been advanced most often are, first, an extra dividend on capital stock; and second, interest on reserve balances.

If the proposed method of distribution of net earnings had been effective law and applicable to the earnings of the year ending December 31, 1928 (although it specifically states that it should apply for the first time to the 1929 earnings), and if the method of distribution had been an extra dividend on paid-in capital stock, the various reserve banks would have paid to their member banks, instead of the 6 per cent which they did pay, the dividends set forth below, approximately:

Bank	*Per cent*
Boston	14
New York	14
Philadelphia	14
Cleveland	14

Richmond	12
Atlanta	19
Chicago	15
St. Louis	10
Minneapolis	13
Kansas City	10
Dallas	12
San Francisco	12

Stated in terms of dividend payments, these earnings (and let it be remembered that even under the Glass proposal only 50 per cent of excess earnings go to the member banks) appear to give to the stockholding members a very substantial return upon their capital contributions. A cursory examination would lead to the conclusion that the reserve banks are perhaps emphasizing profitmaking. But if the excess earnings are distributed to the member banks not in the form of dividends on capital but in the form of interest on reserve balance (or without calling it interest, distributed on a *pro rata* basis measured by reserve balances carried), the picture is somewhat otherwise. On that basis most of the federal reserve banks could have distributed less than 1 per cent of reserve balances carried. The Atlanta bank could have paid something in excess of 1 per cent.

The Glass proposal treats the twelve federal reserve banks separately and individually. A member bank would profit as its reserve bank earned. It is admitted that such an arrangement might result in the bank which received only a 10 per cent dividend on its contribution to reserve bank capital (if that were the method of distribution) looking covetously at a neighbor bank just across a district line which received 19 per cent on its capital contribution. A good many petitions for the relocation of district lines might result. On the other hand, just as serious difficulties would be met if the surplus earnings of all twelve reserve banks were pooled. The member in the district where a 19 per cent dividend was earned might have some unwillingness to see its return cut down in order that member banks in other districts of lesser earnings might have their dividend returns increased. In any case, as a matter of fact, the payment to the individual member bank is not of great consequence.

A bank with a capital and surplus of $100,000 holds $3,000 in the stock of its regional reserve bank. The regular 6 per cent dividend on that amount is $180. Doubling or even trebling that return does not seem significant, and yet one of the chief reasons given by many smaller banks for not joining the federal reserve system is the meager return, and the contrasting possibility of a 2 per cent or 3 per cent interest payment from city correspondents. In any event whether the monetary return be large or small, the principle is thought by some to be important that chiefly to member banks and not the government should belong

federal reserve bank earnings. Some allege that under the present arrangement member banks look upon without criticism, if they do not indeed approve, swelled expenses of reserve banks, so that even if gross earnings are large, net earnings will nevertheless be small and the government by that much deprived of franchise tax payments.

Many other proposals somewhat along the lines of the Glass bill have been advanced. One of the most widely discussed was suggested a few years ago by a southern banker. His proposal was that after all necessary expenses of the reserve bank have been paid and after the 6 per cent annual cumulative dividend payment has been made, net earnings should go to surplus account until it equaled at least twice the amount of capital stock paid in, and that even after that net earnings should go to surplus account if the total of capital and surplus of the reserve bank were less than 20 per cent of total deposit liabilities. In the event that surplus had been built up to 200 per cent of paid-in-capital and the combined capital and surplus figure equaled 20 per cent of total deposits, the excess earnings, according to this proposal, were to be distributed to member banks in proportion to their average reserve balances actually carried and actually required by law; provided, however, that no member bank should receive a greater participation in such distribution of earnings than an amount equal to 1¼ per cent of its average reserve actually required and actually carried during the year. Earnings over and above such an amount were to go to the government.

The essential difference between this plan and the Glass proposal is that it respects the present legal provision that surplus must equal 100 per cent of subscribed capital before there is any other distribution of earnings. The Glass proposal envisages the eventual attainment of a 100 per cent surplus but does not require that distribution of earnings to member banks depend upon and wait upon that contingency. It may be noted in passing as a commentary upon the plan of the southern banker referred to, that at the end of 1928 only one reserve bank had a capital and surplus figure equal to 20 per cent of its total deposit liabilities.

Curiously enough, while the Glass proposal would seem to satisfy those who think member banks should receive a greater share of the earnings of reserve banks, it certainly would not meet the desire of those who want to see the government get a lesser share or none at all, because, as will be seen by glancing at the table below, the share of the government in the 1928 earnings of the federal reserve banks would have been larger under the Glass proposal than under present law. The government received as a franchise tax for the year 1928, $2,584,659. Had the proposed Glass amendment been operative, the government

would have received $6,312,958. It appears to be a case where everyone gains and no one loses. The loss, of course, is to the reserve bank surplus. It would seem that the Glass bill is ingeniously devised to please both the government and the member banks. Before its enactment owever, serious consideration should be given to the importance of a proper surplus for reserve banks. The surplus is a guarantee of dividends in future years of possible lower earnings. Perhaps some modification of the Glass proposal would permit member banks to share in earnings and yet not limit, as it does, accumulation of surplus.

TABLE CONTRASTING THE DISPOSITION, UNDER PRESENT LAW, OF 1928 NET EARNINGS OF RESERVE BANKS WITH THE DISTRIBUTION WHICH WOULD HAVE BEEN MADE UNDER A RECENT LEGISLATIVE PROPOSAL

Federal Reserve Bank	To surplus under present law	To government under present law	To surplus under Glass proposal	To government under Glass proposal	To members under Glass proposal
Boston	$1,725,692	—	$ 431,423	$ 431,423	$ 862,846
New York	8,274,708	—	2,068,677	2,068,677	4,137,354
Philadelphia	2,438,886	—	609,721	609,721	1,219,442
Cleveland	2,323,872	—	580,968	580,968	1,161,936
Richmond	74,828	$673,449	—	374,138	374,138
Atlanta	558,425	823,301	345,431	345,431	690,863
Chicago	3,663,668	—	915,917	915,917	1,831,834
St. Louis	423,011	40,293	115,826	115,826	231,652
Minneapolis	43,350	390,151	—	216,750	216,750
Kansas City	40,651	365,855	—	203,253	203,253
Dallas	163,301	291,610	113,727	113,727	227,455
San Francisco	1,348,507	—	337,127	337,127	674,253
	$21,078,899	$2,584,659	$5,518,817	$6,312,958	$11,831,776

The slight difference in totals of Columns 1 and 2 and of Columns 3, 4 and 5 results from disregarded fractions.

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AN EXAMINATION OF SOME MARSHALLIAN CONCEPTS

In what follows I shall attempt classification of familiar economic doctrines with familiar names. No new terms will be introduced, and such exposition of theory as is presented will follow along Marshallian lines. Indeed, I shall venture to interpret some Marshallian concepts by making rigid distinctions which Marshall refused to make. His refusal was based upon a deep-seated belief in the "Principle of Continuity."[1] He would not draw *rigid* lines, even for purposes of exposition, between the normal and the abnormal, the long-period and the short-period adjustment. There is, however, no reason why an obscure disciple of Marshall should avoid doing this, in the hope that thereby certain conflicting and erroneous interpretations may be exposed.

I

In discussing the determination of value under competitive conditions, it is customary to start with the market adjustment.[2] Into this adjustment, which is entirely a present one, neither production goods nor costs enter at all. Costs do affect future production and future price, but at any time market price is settled through establishment of an equilibrium between the existing supply of consumption goods and existing demands for them. That this price is below or above unit cost of production is of no direct significance, because cost depends on past events, and in the market adjustment we can say with Jevons that "bygones are forever bygones."

The problem of value which logically follows has to do with the establishment of normal price. Here the proper assumption is that the supply of productive resources is fixed.[3] These productive resources are to

[1] See *Principles*, 8th ed., preface, pp. vi-ix.

[2] The classification of the problems of value which I give is that of Marshall. See *Principles*, pp. 378-80; and *cf*. F. Knight, *Risk, Uncertainty and Profit*, footnote, pp. 142-44.

[3] This problem Marshall deliberately refused to put in precise form. His reasons are embodied in the following quotation: "The theory of stable equilibrium of normal supply and demand helps indeed to give definiteness to our ideas; and in its elementary stages it does not diverge from the actual facts of life, so far as to prevent its giving a trustworthy picture of the chief methods of action of the strongest and most persistent group of economic forces. But when pushed to its more remote and intricate logical consequences, it slips away from the conditions of real life. . . . .

"The statical theory of equilibrium is only an introduction to economic studies; . . . . Its limitations are so constantly overlooked, especially by those who approach it from an abstract point of view, that there is a danger in throwing it into definite form at all. But with this caution, the risk may be taken; and a short study of the subject is given in Appendix H." (*Principles*, p. 461. *Cf*. also, *Memorials of Alfred Marshall*, selection XIV, and the letter to J. B. Clark, p. 415.)

This statement must win our respect, but many serious students will regret Marshall's decision. To understand Marshall some sort of theory of stable equilibrium has to be worked out, and a more adequate statement on his part might have saved much effort and some misunderstanding.

be organized to satisfy given wants. The economic theory which explains the resultant equilibrium I should prefer to call the law of *diminishing productivity*.[4] This law is the basis of the theory of normal price, and it also shows what return any instrument of production (including labor) would receive under the conditions as given.

Only a brief exposition of a few aspects of the law need be presented. It is a familiar proposition that, if all factors of production save one are held constant, and that one is combined in varying amounts with the constant factors, then, when the amount of the variable factor is small, an increase in its use will at first bring about a more than proportionate increase in product; before long, however, increased application of the variable factor will bring an increase in product which is less than proportionate; and finally, the product will cease to increase and will decrease in absolute amount.[5] Neither the first stage, where product increases more than in proportion to the variable factor, nor the third stage where product absolutely decreases, are significant in the formulation of economic laws, although without doubt actual instances of both can be found. A farmer may be utilizing his resources inefficiently. His labor and his capital may be spread so thinly over a relatively large area of land that his product would be increased more than proportionately if he concentrated use of them on a smaller area. Conversely, resources may be heaped so lavishly on an urban site that use of a part of them has served actually to diminish product. Such gross maladjustments can be explained on no general grounds; they are aberrations which must be examined in each individual case. I shall thus take it for granted that each and every instrument of production will be worked at least to the point of diminishing proportional productivity, and not beyond the point of diminishing absolute productivity. There are many opportunities for misapplication of any sort of resource between these two limits, and it is for such situations only that logical general reasons can be given.

The preceding paragraph has been concerned with physical productivity, and undoubtedly this is the prior and fundamental fact. Consider, however, the case of an entrepreneur who is organizing a business. He will carry his utilization of, for example, labor of any grade, until the last unit yields a product equal in *value* to its cost. Thus determination of the marginal use of any instrument of production depends upon *value* facts.

Any entrepreneur at any time has a given amount of resources under his control. His task is to organize these in the best—most profitable—

[4] See Ely, *Outlines of Economics*, 4th ed., footnote, p. 385. For a clear discussion of the law, see *ibid.*, chapter XX, and also F. M. Taylor, *Principles of Economics*, 9th ed., chapters IX-XI. Taylor uses the term *"diminishing returns."*

[5] See Taylor, *op. cit.*, pp. 124-42, for a careful and complete explanation.

way. He will tend, as the law of diminishing productivity explains, to push his use of every sort of instrument to the margin. If the use of any instrument is pushed past the margin, the addition to cost will be greater than the addition to product. Clearly then, if a firm is ideally organized, considering its resources, management, and existing market, it can only increase product at an increasing cost.[6] If it could increase its product at a less cost per unit, product would be increased. Only if this is so can there be intelligent organization of industry; unless it is true, the idea of good or bad organization of production is meaningless. When we say that a firm is well or badly organized, we mean, I believe, that its resources are or are not welded into their most profitable combination. Under competition and with mobility of resources, there must always be a *tendency* for each firm to get into what is, for it, a best position.[7] A generalized statement of the law of diminishing productivity thus leads inevitably to the conclusion that, in so far as firms have reached this position—and, if conditions remained unchanged, all the survivors would reach it—product can only be increased at an increased cost per unit.

The problem which has been outlined is a static one. Individual entrepreneurs have under their control at any time a *given* amount of the resources of society which it is their task to organize, taking into account a *given* situation. In the world as it is, conditions are constantly being altered and therefore a perfect organization is not possible. A farmer may have made the best possible combination of his resources in the light of existing circumstances. But suppose that, after he has invested in various types of machinery, better and cheaper machines come on the market. If the farmer had his resources again in mobile form he would organize them differently, because he has a new "best" at which to aim. In fact, however, the disequilibrium cannot quickly be remedied. The point I urge is simply that, for static theory, the term "disequilibrium (or "maladjustment") is here the proper one.

There is a related sort of maladjustment which seems to have caused much theoretical confusion. In our actual dynamic society there are many firms which can increase output at a lessened cost per unit. When a new firm is organized (or an old one reorganized), it has to make a place for itself: it has to invest in considerable amounts of fixed capital, to build up good-will, and attract customers. At the outset, when the market for its product is small, its cost per unit will be high, because

[6] Firms are, of course, organized with an eye to future and unknown, as well as to present, prospects. It may be a part of economics to consider how adjustments should be made now in view of possible future developments, but it seems clear that a prior task is to work out an explanation of the proper adjustment to given conditions.

[7] This does not mean that firms in an industry tend to become equal in size.

supplementary costs will be relatively large. But as its market is enlarged and as output increases, cost per unit will fall, because the supplementary costs will be distributed among more units of product. By the time the firm is well established, total cost per unit will be covered by price, and after this position is reached production can only be increased at an increased unit cost. The tendency is for price to cover cost (including profits)—that is the mark at which each entrepreneur aims—and economic laws are statements of tendencies. As a normal thing, a firm cannot enlarge its output at a decreasing unit cost. If it could do so monopoly would result. It is unfortunate that the sort of maladjustment described in this paragraph should sometimes be described as production under conditions of decreasing cost, because the phrase is needed in another and quite different connection.

There is one further point to be noted about the static equilibrium. At any time in the actual business world firms in the same industry are producing at varying costs. The new and struggling firm has a higher unit cost than its established competitors; the firm with obsolete machinery has a higher unit cost than the firm with the best models; the firm, which by a fortunate accident is able to take immediate advantage of unexpected developments external to, but affecting the industry, will have a lower unit cost than most of its rivals. If, however, conditions became static—if the existing situation was able to proceed to a stable equilibrium with no introduction of new and disturbing factors—then the varying costs would disappear, and every unit of any commodity would be produced at the same cost.

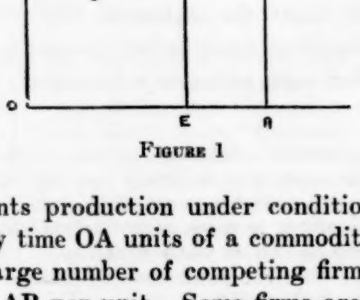

FIGURE 1

Figure 1 represents production under conditions of varying costs. Suppose that at any time OA units of a commodity are being produced (as a total) by a large number of competing firms, and are being sold at a price *equal to* AB per unit. Some firms are producing at a unit cost of AB, others at a unit cost of EF, etc. In short, the curve SS′

(called by Marshall a particular expenses curve) is supposed to represent the existence contemporaneously of a number of different unit costs. I argue that, while this is realistic enough, it is not appropriate to an examination of the theory of normal price. It represents, for many of the firms, a temporary and unstable equilibrium from which they tend to move. The question of significance for the theory of normal price is, *to what position* do they tend to move.

The aim in the organization of any firm is to combine resources in such a way that the normal unit cost, including profits, will be covered by price. For generations it has been a dictum of economists that price and cost tend to be equal. Clearly, the firms producing at a cost of EF are not in their (long-time) normal position, and they will therefore tend to expand their production until their cost becomes AB. It cannot be assumed that the firms producing at a unit cost of EF, can, as a regular thing, make the difference between AB and EF as an *extra* profit, for under competition any extra profit must tend to disappear. Nor can it properly be said that firms with a unit cost of EF produce at that low cost because they are very efficiently managed, because then a payment for this efficiency is excluded from cost, and economic theory has ordinarily assumed that such efficiency must be paid for.[8] Nor is it proper to say that the difference between EF and AB represents rent, because so far as the problem of normal price is concerned rent is a cost. The entrepreneur counts the payment which he makes for the use of land in exactly the same way as the payment he makes for the use of capital. Nor, finally, can the position taken be refuted by approaching the problem in terms of margins and marginal adjustments. The normal cost which tends to result from any given set of conditions is most naturally thought of as coincident with *average* cost per unit. It is, however, at the same time coincident with marginal cost. In a stationary state average cost, marginal cost, and normal cost mean the same thing; and when we discuss the determination of *a* normal cost, we assume that movement is toward the static state, or we at least use the "statical method."[9] In short, the statement that normal price and normal cost tend to be coincident must be interpreted to mean that the cost per unit of product for each and every firm must *tend* to equal price per unit.

[8] It may be that the economist's definition of cost needs revision. Possibly we should get along better (for example in statistical investigations of economic theory), if profits were left out of cost, or if the accountant's definition of cost was adopted. Then, of course, it would be proper to speak of production being carried on at varying costs under static conditions as well as under dynamic.

[9] Marshall, *Principles*, p. 369. The point made here about marginal cost is paraphrased from his statement, *ibid.*, p. 810.

II

There is a third stage into which examination of the problem of value logically falls, and here a definite supply of productive resources is not assumed. Instead, account is taken of the fact that the supply of some of them can be altered.[10] Moreover, conditions of demand can also change. It is for this problem that the so-called laws of increasing, constant and decreasing cost—I prefer to speak in terms of "cost" rather than of "returns"[11]—are pertinent.

When Marshall draws a supply schedule—another term, such as *supply price* schedule, seems to me preferable[12]—he means to represent the different equilibrium costs per unit at which different quantities of a commodity can be produced. The curve tells nothing about prices and it does not represent a number of situations which exist simultaneously—all parts of it are not true at the same time. Instead it represents a number of successive static equilibriums. In the figures below, when OE units of a commodity are being produced in an industry, the normal cost per unit is EF—each and every unit tends to be produced at that cost—and OE and no other quantity is being produced. Similarly,

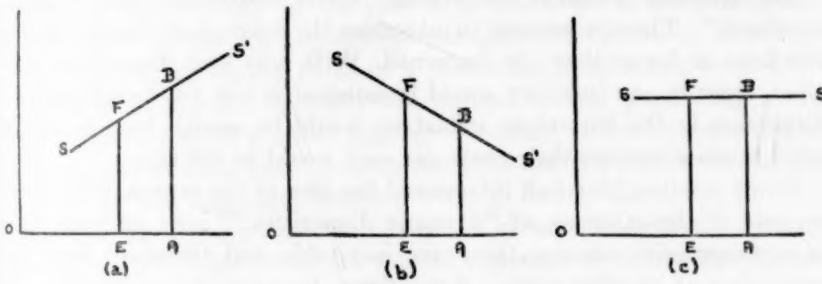

FIGURE 2

when OA units are being produced the normal cost per unit is AB. It makes no difference whether reference is made to production under conditions of increasing, decreasing or constant cost; parallel statements can be made about each.[13]

[10] It is in this connection that the contrast between land and capital becomes significant. Marshall expected that J. B. Clark would, when he wrote his treatise on dynamics, appreciate the classical distinction. (*Memorials*, p. 415.)

[11] *Cf.* D. H. Robertson, "Those Empty Boxes," *Economic Journal*, March, 1924, p. 17.

[12] *Cf.* Pigou, "An Analysis of Supply," *Economic Journal*, June, 1928, p. 238.

[13] See Marshall, *Principles*, pp. 810-12, note 2. Marshall points out (p. 808 and p. 812) that an attempt to go backward on the curves of increasing and decreasing cost necessitates that they be redrawn. For example, in Fig. 2 (b), if production, from being OA, shrank to OE, normal cost per unit would not rise to EF, because economies, both external and internal, would have been acquired when production was larger, and they would not all be lost with a decline. Marshall also calls attention to the mis-

The representative firm is introduced by Marshall in connection with his discussion of these curves, and particularly the curve of decreasing cost. Detailed examination of this concept will, I think, be worth while, because in a recent article by Mr. Robbins[14] criticisms of it are made which seem to be misdirected.

The fundamental difficulty which Mr. Robbins has in interpretation of Marshall arises because he assumes that, in writing of a representative firm, Marshall had chiefly in mind a firm representative in size (and organization). So far as I can see this was not Marshall's idea. He would agree entirely with Mr. Robbins that a change in the output of the industry would cause a firm which was representative to become representative no longer. In fact, on p. 809 of the *Principles* (8th ed.) he states that with a smaller total output for the industry "the representative firm will be smaller, weaker and with less access to external economies." This concept may or may not be useful; possibly it is nominalistic to speak of a unit which varies in identity, size and organization as being representative. My point is that Mr. Robbins does not properly set forth Marshall's position.[15]

Mr. Robbins' remarks concerning "static disparities" are, I think, excellent.[16] There is no need to introduce the concept of the representative firms so far as they are concerned. With only such disparities prevalent, firms in any industry would be unequal in size (although possibly dispersion in the important industries would be small), but, as I have tried to show earlier, their costs per unit would be the same.

In my opinion Marshall introduced the idea of the representative firm because of the existence of "dynamic disparities."[17] At any one time, in a progressive society, these are inevitable and therefore firms are producing at varying costs. Some firms, because of a conjuncture of circumstances, will be producing at a low cost per unit and thus will be unusually prosperous; others will be declining and will aim merely at covering prime costs. In those industries where supplementary costs are high, it is difficult to keep a firm running so that, at all times, total normal cost per unit is covered by price. Price will infrequently coincide with cost. At any time the fortunate firms are more than covering cost by price; the declining, or unfortunate, or new firms are less than covering cost by price. The Marshallian concept of quasi-rent was de-

leading graphic similarity, which obscures the fundamental dissimilarity, between the particular expenses curve and the curve representing production under conditions of increasing cost.

[14] "The Representative Firm," *Economic Journal*, Sept., 1928.

[15] The criticisms which he directs against Mr. Robertson and Mr. Henderson seem to me very pertinent.

[16] *Op. cit.*, p. 392 ff.

[17] The term is that used by Mr. Robbins, *ibid.*, p. 392.

signed to explain just such situations. In the long run and in a static state, the net product of capital goods will approximate normal interest on their cost; but at any time and for periods of considerable length, their product may be much above or much below this figure.

Besides the firms which have been mentioned, there will be others which are intermediate, and their cost will be not only approximately normal cost—cost if equilibrium was obtained from given conditions—but will also be approximately the actual price per unit. This, it seems to me, explains Marshall's position. There is no one representative (I prefer that term to "optimal") size; there is a representative or normal cost. The firm or firms which have that cost are representative at any given time. *The* representative firm should doubtless be normal *both* with respect to size and with respect to cost, but nothing need be said about size.[18] The essential thing which makes a firm representative is its cost. Doubtless Marshall is vague and at times even ambiguous on this point. Nevertheless, adequate confirmation of the interpretation I have given is to be found in the *Principles*. On p. 317, where the representative firm is mentioned for the first time, the marginal note is: "Forecast of our study of the *cost of production*[19] in a representative firm." And in the accompanying paragraph (discussing the causes which govern the supply price of a commodity) Marshall writes: "We shall have to analyze carefully the normal cost of producing a commodity, relatively to a given aggregate volume of production; and for this purpose we shall have to study *the expenses of a representative producer*[20] for that aggregate volume." On p. 342 he writes: ". . . . let us assume that the normal supply price of any amount of that commodity may be taken to be the normal expenses of production by that [representative] firm."

One other reference to the *Principles* must be noticed because there Marshall states more explicitly than anywhere else his reasons for introducing the device of the representative firm. In Book V, Chapter XII, he first points out the difficulties which are encountered in a study of decreasing cost.[21] The vital point is that, for things which obey this law, supplementary costs are likely to be a relatively large portion of total cost, "because their production needs the investment of a large capital in material appliances and in building up trade connections."[22]

[18] *Cf.* Pigou, "An Analysis of Supply," *Economic Journal*, June, 1928, pp. 239-40, and especially the footnote on p. 240. The equilibrium firm of Pigou is, in essentials, the representative firm of Marshall. However, Pigou, aiming first of all at precision of statement, definitely puts aside any claim that the equilibrium firm is representative in size.

[19] Italics mine.

[20] Italics Marshall's.

[21] He uses the phrase, "increasing returns."

[22] *Op. cit.*, p. 458.

On that account maladjustments are corrected only very slowly. At any time and for periods of considerable length, a goodly part of the earnings are quasi-rents and depend upon the conditions of demand. When business is difficult, entrepreneurs are peculiarly fearful of spoiling their market; they act cautiously, and therefore do not quickly and drastically cure the maladjustment. Conversely, when business is booming, the large investment of fixed capital which is required tends to retard entry into the trade. For these and other reasons there will be at any time significant variations in unit costs among firms producing articles which obey the law of decreasing costs; and therefore it is not feasible to "regard the conditions of supply by an individual producer as typical of those which govern the general supply of the market."[23] The marginal note which Marshall appended to the section immediately following reads: "The solution of the difficulty is in the action of a representative firm."[24]

Thus the representative firm is, I think, principally a device of exposition. Marshall wanted to bring his theory close to reality. He refused to make the heroic assumption of a static state. On that account he was debarred from use of the term "marginal cost." To discuss the marginal cost which actually prevailed, at least for articles produced under conditions of decreasing cost, would be to center attention on unrepresentative firms and *unrepresentative costs*. Where supplementary costs are relatively high, firms will tend to be marginal as units; a contraction in the product of the industry, instead of being diffused and spread among many firms, will come about through the elimination of weak firms. The condition of these declining firms, or of firms which, while not declining, had not reached their full stature, is of slight theoretical significance, because their unit costs are not the norm toward which prices tend. The cost per unit of the representative firm *is* such a norm; it is approximately the equilibrium cost—the cost which would be established for all firms if conditions became static. In short, the cost of the representative firm is not actual marginal cost in a given situation, and therefore Marshall, clinging to reality and interested in a study of the forces determining normal, rather than market equilibrium, avoided use of the terms "marginal cost" and "marginal firm."[25]

The representative firm is, it seems to me, a useful and logical device.

[23] *Ibid.*, p. 459.

[24] *Ibid.*, p. 459, section 3.

[25] It is over this point that Mr. Henderson seems to me to have fallen into error (*Supply and Demand*, pp. 59-60). He wanted to discuss normal costs in terms of margins and therefore, as Mr. Robbins has pointed out (*Economic Journal*, Sept., 1928, pp. 399-402), he resorted to an unreal and ineffective definition of a marginal concern.

I venture, however, to find fault with another part of the Marshallian analysis. As has often been pointed out, there is unreality in the concept of a supply price curve, whether to represent production under conditions of increasing, decreasing, or constant cost. Several years ago Professor Clapham raised embarrassing questions on this score.[26] He then conjectured that both Marshall and Pigou would rule out inventions as a cause of decreasing cost.[27] There can now be no doubt about Pigou's position. It is stated explicitly in the following passage:

> In real life, with the general advance of knowledge, new methods of production are being continually introduced and new technical appliances invented. Some of these changes occur, so to speak, "spontaneously;" that is to say, they are due to factors which would operate *even though the output of the industry remained constant.* Others are the result of changes in the scale of output, being called out in response to changes in demand. Of course, in practice, it may often be impossible to say whether a particular invention in, say, the process of steel manufacture is spontaneous in the above sense or not spontaneous. Logically, however, the distinction is quite clear. In the following pages spontaneous changes are definitely ruled out of consideration. Therefore an industry may display continuously falling supply price through a long series of years, and yet may not, in any sense relevant to my problem, be operating under conditions of decreasing supply price. An industry is said to conform to increasing, constant or decreasing supply price when, *apart from spontaneous changes—i.e.,* changes in technique not due to changes in output —increase of output would be associated, as the case may be, with increasing, constant or decreasing supply prices.[28]

It must, of course, be admitted that "logically . . . . the distinction is quite clear." But logical distinctions in economics, if that alone, are barren. Few writers have expressed this point more vividly than does Pigou himself in the opening pages of his *Economics of Welfare.* ". . . . There will, I think, be general agreement that in the sciences of human society [economics is singled out for special mention], be their appeal as bearers of light never so high, it is the promise of fruit and not light that chiefly merits our regard."[29] I suggest that a supply price curve, which represents long-time alterations in unit costs with "spontaneous changes ruled out of consideration," cannot bear much fruit and must be unsatisfactory to economists who observe an industrial world where cost changes are, I suppose, principally brought about by changes in

[26] *Economic Journal,* Sept., 1922, "On Empty Economic Boxes."

[27] *Op. cit.,* p. 310. Mr. Robertson (*Economic Journal,* March, 1924, "Those Empty Boxes," p. 18) would not exclude inventions.

[28] Pigou, "An Analysis of Supply," *Economic Journal,* June, 1928, pp. 238-39. See also Pigou, "The Laws of Diminishing and Increasing Cost," *Economic Journal,* June, 1927, pp. 188-89; and *Economics of Welfare,* 2nd ed., p. 193. Each of the statements given in these three references is more explicit than its predecessor.

[29] *Economics of Welfare,* p. 4.

technique. Moreover, no one knows, or is likely soon to know, what inventions are or are not "spontaneous."

However, the admission may be made that any logical development of the problem of value leads inevitably to the concept just discussed, as well as to the grouping of supply price curves into the categories of increasing, decreasing and constant cost. To have our logic right is certainly of some importance, particularly in a negative way. "We are thus put in a position to detect and expose sophistical dogmatism. It is better to know exactly what facts are required to make the answering of a question possible, even though those facts are unattainable, than to rest in a fog of vague and credulous opinion."[30] Unfortunately, this logic is taken over-seriously; sometimes the memory that it is a series of empty boxes fades. Indeed the temptation to elaborate on the mystical conclusions—to pile logic on logic—has apparently been overpowering: witness the misguided statements which appear in so many elementary texts concerning the effects of taxes and bounties upon commodities produced under conditions of decreasing, increasing or constant costs. Erection of further super-structure upon a suppositious foundation must be dangerous for a subject like economics which is essentially practical.

III

Let us assume with Pigou and Marshall that inventions, except when they are not "spontaneous," should be excluded as an influence bearing upon supply price curves. Exclusion of *any sort* of inventions means that the problem of value has still another aspect. When John Stuart Mill wrote about "the law of diminishing return from land," agricultural invention entered very definitely into his argument.[31] His belief was that the cost of production of the fruits of the earth tended, as time went on, steadily to increase. In short, he affirmed that there was an historical tendency toward *decreasing returns*, and it seems to me that confusion would be avoided if this meaning, and no other, was attached to use of the phrase.[32] Multiplication of names in economics is, of course, to be avoided, but that is not at issue here, since the phrase,

[30] *Ibid.*, p. 199.

[31] See *Principles of Political Economy*, Ashley edition, pp. 183-88; also bk. IV, chapter III. That Mill was confused about this "law" is evident. In one place he says: "It is the law of production from land, that in any *given state* (italics mine) of agricultural skill and knowledge, by increasing the labour, the produce is not increased in an equal degree . . . ." (p. 177). Mill here has in mind the static problem: he states one phase of the law of diminishing productivity. Clearly the dynamic or historical "law" of production from land is quite another matter, and yet Mill slips from the one to the other without warning. (See Bullock, "The Variation of Productive Forces," *Quarterly Journal of Economics*, Aug., 1902, for an examination of the views of Mill and other writers on this point.)

[32] *Cf.* Ely, *Outlines of Economics*, 4th ed., pp. 413-17.

decreasing returns, is already in use. The trouble is that it is used with different meanings by different people.

Mill was not willing to proclaim a law of increasing returns for manufactured goods. "Mr. Senior has gone the length of enumerating as an inherent law of manufacturing industry, that in it increased production takes place at a smaller cost. I cannot think, however, that even in manufactures, increased cheapness follows increased production by anything amounting to a law. It is a probable and usual, but not a necessary consequence."[33] Whether or not there is a "law" of increasing returns, it would seem proper, for reasons just stated, to reserve for the phrase a meaning converse to decreasing returns. Both should be regarded as historical statements.

That there is a *law* of increasing or of decreasing returns seems more than doubtful, although by investigation of past conditions of production we might perhaps "arrive at certain tolerable historical results."[34] But one can readily believe that such an investigation would fail to uncover any class of commodities which has been produced under conditions of decreasing returns.[35] Those writers who have enumerated a secular law of decreasing returns make it in the form of a prophecy for the future. Doubtless the social scientist should call to the attention of the world impending events revealed to him by his study. Nevertheless, there is a danger that belief or prophecy will be converted into dogma and as a result bring ridicule upon economics.

J. A. Maxwell

Clark University

[33] Mill, *op. cit.*, p. 703.
[34] Clapham, *op. cit.*, p. 314.
[35] See F. L. Patton, *Diminishing Returns in Agriculture*, chap. VII.

COMMUNICATIONS

Small Loans Problem

In the June issue of the AMERICAN ECONOMIC REVIEW, appeared an article on the small loans problem by Clyde Olin Fisher. While the author gave a great deal of space to a consideration of the experience of Connecticut under the Uniform Small Loan act, he discussed many of the important questions of the small loan business which are of general interest both to those engaged in the business and to those concerned with its public aspects in all states. All should welcome the appearance of this article in the REVIEW, as it testifies to the interest which economists are now taking in this important subject. It would appear, however, that a fuller explanation and elaboration of certain points in the article are necessary if the truth about the small loan business is finally to appear.

Speaking of the change made in 1927 in the Connecticut law giving the borrower the option to pay off his loan at any time, the author does not make it clear that the terms of repayment are made only after a most thorough investigation of the whole financial situation of the borrower. In other words, the installments are adjusted to his capacity to pay. The ability to repay at an earlier date would be usually a matter of luck, such as an increase in wages, inheritance, or sudden change in economic status of the borrower. It would not be a matter of importance in 98 per cent of the cases; and few lenders, I believe, would refuse to accept repayment when offered. As a matter of business principle, it would be foolish to do so.

In regard to the effect of the law on loan sharks, much might be written. If Mr. Hilborn made the statement in 1919 that the loan sharks had been driven out of New York, he was entirely mistaken. Knowing Mr. Hilborn, I am inclined to think that he had in mind the effect of the law in other states where the 3½ per cent rate had been incorporated in the law. As the writer points out, the New York rate has acted as a deterrent to legitimate lenders who saw little chance of making a profit under the law. They offered no competition to the loan sharks who have operated in New York State without much opposition on the part of anyone. The best testimony as to the effect of the law on loan sharks can be had from legislative experience. Without question, the most violent opposition to the passage of the Uniform Small Loan act comes from the high rate lenders and salary buyers. Efforts to repeal the law, to change the rate or to break it down in some other way can be traced, nine times out of ten, not to philanthropists or citizens interested in the welfare of borrowers, with whom one can reason, but to high rate lenders and salary buyers to whom this law offers the greatest opposition that they have ever met. They are bitter and resourceful fighters; and the measure of the efficacy of the law is their unrelenting hatred of it.

"It is quite evident," says the writer, "that the earnings of the chain companies in Connecticut are much larger than those of the small independent local companies." I have not on hand the figures for Connecticut; but it should be pointed out that a chain organization has no advantage over a small concern in this business of making small loans, assuming of course that the size of the individual operating unit, that is the individual loan office, is the same. I mean by this that the loan business is not one of increasing returns. If we take it for granted that every manager in a chain organization is

superior to every manager of individual companies, or that somewhere in the chain organization there is superior management which makes itself felt in the business, then we might accept the conclusion that a chain organization, *ipso facto*, will be able to make a greater return on its investment. Actually, this is not the case in scores of instances. It would be easy enough to locate, if not in Connecticut then elsewhere, small concerns that are doing better financially than many of their large competitors.

The writer suggests that it would be a good thing to limit the number of loan offices with reference to population. This is not so easy as it would seem to be. We cannot be guided wholly in this by the experience of banking commissioners in preventing the organization of new banks in communities already well served by existing banks. The passage of the Uniform Small Loan act by a state opens up a field into which capital rushes immediately. How is the decision to be arrived at as to which companies are to be allowed to do business? This argument does not, of course, apply to the organization of new companies in states which have long had the Uniform Small Loan act on their statute books.

But even in these states, it would be difficult to judge as to the number of companies needed to serve the population. Take for example the figures quoted for Middletown: "In 1927 the loans of these companies were $21,528.48; $12,454.16; $4,912; and $58,578.20, respectively. In 1928 their loans were, respectively, $45,474.77; $24,259.09; $6,017; $74,335.74." Anyone acquainted with the loan business would admit, I think, that there had been a very satisfactory increase in the loan balance of three of the four companies, all within the space of one year.

If it should seem advisable after more experience with the law to limit the number of loan offices, a better way would be to prevent the opening of small offices. It is folly to run an office for two years, as was done in Middletown according to the author, with loan balances respectively of $4,912 and $6,017. A concern of this size cannot possibly make expenses.

"Some light," says the author, "may be thrown on the reasonableness of the interest charge by the experience of commercial banks in the making of small loans." I have yet to find any evidence to this effect. The losses in the endorsed note business may not be very much less on paper than those suffered by lenders operating under the Uniform Small Loan act; but the latter keep down their losses by waging a hard and costly campaign against "slows" and "skips," while the former have a relatively easy task of collection owing to the presence of endorsers. These are called upon, when the need arises, to do the collecting. Failure to pay promptly means that notification is immediately sent to the endorsers. Since at least one of them is usually a man of substance, the money is forthcoming with a minimum of cost. The mere fact that a borrower has two good friends who will endorse his note is evidence that he himself is almost certain to pay the installments when due. Probably a good percentage of these borrowers ought to obtain their loan at the regular banking rate of interest, as their economic standing and that of their friends would justify it.

Banks, it should be realized, have, too, an eye on other things than profit from these loans. From a given number of endorsers they expect to obtain a certain number of customers. In a certain western state a man having the names of two friends to offer as endorsers went recently to a bank for a loan. He was told that the bank would not make him a loan because the endorsers

were not depositors in that bank. He then went to a bank which his friends patronized and was told there that as he himself was not a depositor the bank could not make him the loan. Some banks, I have been told, require one of the endorsers to be a holder of real estate. Others, it would seem, loan only to their own depositors or to a man who presents the name of a depositor as endorser. As an advertising feature, the scheme has distinct value.

Banks and other concerns doing an endorsed note business are not limited as to size of loans, except where they have been compelled to take out a license under the Uniform Small Loan act. Mr. Fisher himself points out that the National City Bank makes loans up to $1,000. The average loan of endorsed note concerns is at least twice that of loan companies operating under the Uniform Small Loan act. This fact alone would make possible a great reduction in rate, since it is the number of loans which run up the overhead in an office. One loan of $300 is equal to six loans of $50. But the cost of making the $300 loan would be no greater than the cost of making one of the six $50 loans. Sending a man to six homes instead of to one increases the cost enormously of placing out $300 of capital; and this multiplication of effort caused by making many small loans holds true also for office work. Collection costs, likewise, mount up correspondingly with the decrease in the size of the loan. Any comparison, therefore, between lending concerns which does not take into account the size of the average loan is bound to be very misleading.

Banks enjoy a cheap source of capital which no loan company as such can ever hope to duplicate. Deposits cost the bank very little in comparison with the cost of capital which the loan companies have thus far obtained from the investing public. Even on savings accounts, the banks seldom pay more than 3 or 4 per cent; on checking accounts still less. On the other hand, loan companies have found it necessary, so little known is the business, to offer high returns, often as high as 8 or 10 per cent to attract the capital needed in their business.

Moreover, and this is most important, not a single authenticated instance has come to hand of a bank making any profit out of this branch of its business. It would be of great assistance to an understanding of the small loan problem, if banks would publish a full financial report of their small loan business showing average loan, overhead, cost of capital, taxes, advertising, profits, etc. The statement of a banker that the rate is too high means nothing unless backed by reliable and detailed figures.

Mention is made of the cut in rate by the Household Finance Corporation. Parenthetically, we should note that this corporation has done exactly what the author seems to feel no concern would do, that is, reduce the rate if it seemed too high. It should be noted, however, that this company is the oldest one in the business, having an exceptionally well-trained staff of executives, supervisors, managers and office assistants, and a long record of successful operation. By reason of these facts, it was able to secure capital through the usual investment channels at a reasonable rate. Up to the time of the flotation of its preferred stock by Lee, Higginson & Company in October, 1928, no concern had been able to do this. So little known and understood was the business of making small loans that hitherto no reputable investment house had been willing to underwrite an issue. Such stock and bonds as had been sold by other companies had been peddled about from door to door to individual investors who were induced to buy only through the offer of a

large rate of returns. There is no evidence, however, to show that profits under the Uniform Small Loan act, permitting a monthly charge of 3½ per cent, have been unduly high in comparison with profits made in other lines of business. Where there is a need for capital to be used and the field is little known, a larger profit ought logically to prevail. Moreover, the Household Finance Corporation is not now making loans under $50 as it has found that it cannot make these small loans at the 2½ per cent rate without a loss. Therefore, the action of the Household Finance Corporation in voluntarily reducing the rate is not proof that the entire need for small loans can be supplied at the rate which it charges. Rather does it prove that when there is a sufficient amount of capital in the business and the investing public learns that it is a stable and reasonably profitable business, the rate will be reduced through competition to the point where no greater return can be made in this line of business than in others. It is far better to wait for this than to reduce the rate by legislative action to the point where only meager and inadequate profits can be obtained and thereby to stop the flow of capital into an important field which needs it.

In view of what the author says about the bad effect of the business on borrowers, it is interesting to read the testimony of the borrowers themselves. In Wisconsin, an attempt was made in the summer of 1929 to repeal the law. An impartial committee of prominent citizens mailed ballots to all the customers of small loan offices in the state, asking if they wished to have the law repealed. Of the 13,487 votes cast, 12,577 or 93.2 per cent, were against the repeal of the law. A large number of letters were voluntarily sent along with the ballots. A representative sample of these was printed and handed to members of the Wisconsin Assembly. Anyone who will take the time to read these letters will surely agree that the great majority of customers of the small loan offices were decidedly benefited by the credit service placed at their disposal by the small loan companies.

The loan companies come in for a considerable amount of criticism in the article on account of the fact that many of their customers borrow not once but many times. The author thinks that as "welfare organizations dedicated to the promotion of thrift" they fail lamentably. It does not seem to me that loan companies should be called welfare organizations but simply business concerns that fill a gap in our credit structure. Some years ago, it was learned that existing credit institutions did not satisfy the needs of farmers for long term loans. After considerable debate, and additional legislation, a group of institutions was developed to fill the gap. Because special legislation is needed to provide the necessary legal setting, there is no reason to designate such institutions as welfare organizations. Nor does the high rate allowed, nor the class of people who patronize these loan companies, make them welfare organizations in the ordinary sense of the term. They serve the laboring class as do many other business organizations and sell their goods under conditions of competition at a price that will enable them to continue to function. Small loan organizations are business concerns that have been developed to satisfy an existing economic demand.

Unquestionably, they do assist many families to clean up their manifold indebtedness to the butcher, the baker, and the candlestick-maker. They find it far easier to pay one creditor on terms adjusted to their income at regular intervals than to meet demands for lump-sum payments at inconvenient times from those who while they may be good merchants are not

skilled in the collection of accounts which must be paid in installments. The Small Loan act is so drawn as to make it necessary for the lender to explain every phase of the loan transaction to the borrower. There can be no concealment of the interest rate as in the case of deals made on the discount plan. In so far, therefore, as it is possible to develop thrift through teaching individuals how to handle financial accounts, the Small Loan act and the business carried on under it are helpful. It would be too much, of course, to expect in any line of business that all advertising would be perfectly phrased so as not to do more harm than good. A margin of foolish and unwise advertising talk will have to be allowed in the small loan business as in other lines that cater to the wants of the laboring class.

As to borrowing many times, this does not seem to me so dangerous as the writer would have us believe. I suppose that on first thought many would justify a single loan made at a high rate of interest but would unhesitatingly condemn the practice of repeated borrowings. They fail, in my opinion, to take account of the conditions under which people live. Let us realize once for all that the high pressure advertising of today stimulates the desire for a higher standard of living. Anyone who started out to wage a campaign for restricted expenditure would probably be stoned to death by the very people whom he desired to help. At any rate, it is certainly demonstrable that the need for credit is felt not once in a lifetime but over and over again by the average family. Many loans are made, for example, on account of illness or to pay for an operation. These are recurring needs for most families. An unusual family expenditure is not an unusual thing to have happen. Is it not too much to expect that a single extension of credit in time of need will result in placing a family in so fortunate a position as never henceforth to be confronted by the necessity of borrowing? If this great benefit could so easily be attained, the welfare of the masses of the population would indeed be easily within our grasp.

In conclusion it is well to point out that the business of making loans under the Uniform Small Loan act is still very new. Tremendous progress has been made in the last fifteen years. If an equal advance is made in the next fifteen years, the small loan business will certainly be on an unusually firm and equitable basis. There are undoubtedly many problems in it still remaining to be solved; and I have no desire in the comments which I have made on the article to minimize the usefulness of the writer in bringing to the attention of economists the many problems of the small loan business.

LOUIS N. ROBINSON

Interest Rate on Small Loans

In the article by Mr. Fisher on "The Small Loans Problem: Connecticut Experience" in the AMERICAN ECONOMIC REVIEW, June, 1929,[1] the following paragraph is found:

> Some light may be thrown on the reasonableness of the interest charge by the experience of commercial banks in the making of small loans. The American Bank and Trust Company of Bridgeport makes loans of this type secured by endorsement. Interest of 6 per cent is deducted in advance and the borrower agrees to repay the loan in twenty-five weekly in-

[1] AMERICAN ECONOMIC REVIEW, vol. XIX, no. 2, pp. 181-197.

stallments. At first this bank made an additional service charge of approximately 1 per cent and a small insurance charge. Both these charges have since been discontinued because of a "feeling that they were unjust and that the 6 per cent interest for the length of time the note was to run was ample remuneration." While this amounts to an interest charge between 12 per cent and 13 per cent, this is far short of the 42 per cent authorized by law. . . .[2]

In as much as this experience by the American Bank and Trust Company of Bridgeport is used as a basis of comparison by means of which to question the necessity and propriety of the high rates permitted under the Small Loan act of Connecticut, it seems well to point out that there appears to be some error in the computation by which Mr. Fisher arrived at the conclusion that this bank has been charging a rate which in reality amounts to "between 12 per cent and 13 per cent" interest. The fact is, from the statements of the case, that the true interest being charged by this bank on these loans is almost double that given by Mr. Fisher. Doubtless the discrepancy can be explained by the fact that an individual borrowing under this plan does not have the whole amount of the loan for the full twenty-five weeks, but for an average of only half of that time. Or, stated another way, since he begins payment at the end of the first week and pays off the loan in twenty-five weekly payments, he can be said to have only an average of half of the total amount for the entire twenty-five weeks. By either method of computation, the actual, yearly rate of interest being paid is about twice that stated by Mr. Fisher. In reality, if one leaves out of account the fact that the loan is discounted, the borrower under the plan described in the foregoing paragraph will be paying an interest rate of but slightly under 25 per cent. If one goes further and computes the rate in view of the fact that the borrower never receives more than 94 per cent of his contracted loan (due to the discount method), the true rate of interest paid actually is slightly in excess of 26½ per cent per year. These corrections doubtless have a material influence on the conclusions to be drawn from this paragraph of Mr. Fisher's article.

JOSEPH E. SHAFER

Reply on Small Loans Problem

The comments of Mr. Louis N. Robinson on my paper on the small loans problem in the June issue of the AMERICAN ECONOMIC REVIEW have interested me and intrigued me to make some further observations. It is inevitable that abuses will arise in any new departure, whether it be in the making of loans or in some other field of economic activity. It was with a view to the elimination of these abuses in the small loan field that my article was written. I am glad to note that Mr. Robinson joins me in advocating the modification of the Small Loan law wherever it is found necessary.

To answer Mr. Robinson in particular, the facts in Connecticut show that lenders did refuse to accept prepayment of loans. Since this was done, even if in a small minority of cases, the borrower should be protected against a refusal of the lender to accept payment. Perhaps the occasion for prepayment in most cases would arise from the success of the borrower in securing

[2] *Ibid*, p. 192.

from other sources a loan on easier terms. It is no more safe here than elsewhere to depend upon the voluntary act of the lender. At any rate, this was the view of the Connecticut legislature in the enactment of the 1927 amendment.

I am frank to admit that an individual unit company can operate efficiently even though it has not the support of a chain. It does seem, however, that the chain has one distinct advantage, namely, the ability, through a wide distribution of risk, to secure its funds at a low rate of interest. Mr. Robinson refers to the Household Finance Corporation which, incidentally, is a good example of this advantage. But this is irrelevant to the point which I was trying to present, namely, that the necessitous borrower should not be penalized in the paying of a rate of interest high enough to support the inefficient small unit. Mr. Robinson apparently agrees with this view when he says, "It is folly to run an office for two years—with the loan balances respectively of $4,912 and $6,017." Be that as it may, one of the arguments presented against a lower rate of interest in Connecticut has been the claim that this would eliminate the small local company in favor of the chain financed by outside capital. I still maintain that this is not a valid position to take if the welfare of the borrower is to be considered. At the last session of the Legislature in Connecticut a law was passed looking toward the ultimate demise of the small company. This law provided that any new company must have a paid-up capital of at least $25,000 unless formed in a city of less than 10,000 population, in which case the minimum capital must be $10,000.[1] This is undoubtedly a step in the right direction and, I judge from Mr. Robinson's comments, would be approved by him.

It was with a great deal of reservation and hesitation that I mentioned the interest rates charged by commercial banks. There was no suggestion that experience here would do more than throw some light on the problem. And it is conceivable that even commercial bank policy in this respect needs changing. In my article I admitted that the overhead was a large part of the cost of making small loans. I still fail to see that the rate charged should be admittedly so high as to encourage lenders to make loans the collection of which involves necessarily "waging a hard and costly campaign against 'slows' and 'skips'." With less margin of profit available to the companies it stands to reason that many of these unworthy borrowers would not be accepted. As it is, the deserving borrower is penalized to pay for this "campaign" to collect from loafers and deadbeats.

Mr. Robinson insists upon the desirability of having bankers publish more information as to the profitableness of their small loan business. To all this I give hearty assent. In fact, the biggest single difficulty in studying the small loan problem in Connecticut lay in the refusal of the small loan companies to give just the information which Mr. Robinson demands of the banks. Should they give these figures—a policy which would seem to be enlightened self-interest unless there is something to conceal—they would facilitate greatly the scientific study of the small loan problem. It is even conceivable that the present rate of interest in Connecticut would be found necessary. I should like to paraphrase one of Mr. Robinson's sentences and say that "the statement of the small loan companies that three and one-half per cent interest monthly is not too high means nothing unless backed-up by reliable and de-

[1] Public Acts of Connecticut, 1929, ch. 207.

tailed figures." These figures the loan companies refuse to publish. The one thing above all others which I urged in my article was the necessity for more information, not now available. In Connecticut the attitude of the small loan company officers has been that this was their business and that the public had no right to pry behind the scenes. I should like to second the plea that this information be made available both by banks and small loan companies.

The Wisconsin questionnaire among those addicted to the small loan service is, to say the least, unconvincing. If perpetual borrowing at such high rates of interest be a vice—and I contend that it is unfortunate—the borrowers are the last ones to give an answer as to its desirability. They may be their own worst enemies. One might as well ask a pronounced inebriate if he favored the removal of the source of his periodic doses of tonic. These people are not the ones to view the problem objectively.

Mr. Robinson thinks that competition will ultimately lead to a reduction in interest rates. But where the loan business is so over-worked that every company has to engage in high pressure salesmanship to attract customers, no one company can afford to reduce the rate charged. It is my contention that Middletown does not "need" four companies to meet the requirements of legitimate borrowers. The duplication of companies under a "laissez-faire" policy must cause higher overhead and hence a higher interest charge. I can see no more assurance of lower rates from this source than hope for reduced railroad rates by the duplication of railroad lines where one road can handle all the traffic efficiently. Nor can I join Mr. Robinson in his apparent gratification at the rapid increase of business of small loan companies in Middletown. This shows not so much the response to a real need as it does an enlarged volume of business that has arisen from high pressure salesmanship to bring into the fold of borrowers many who have no right to enter the portals. Competition to get enough business to spread out the overhead now leaves the small companies no alternative to this policy.

When Mr. Robinson advocates for the working man a higher level of expenditure made temporarily possible by loans at 42 per cent a year (really 51 per cent)—this he apparently does in the next to the last paragraph of his paper—I cannot follow him. It is a matter of simple mathematics to see that this higher temporary level must really be reduced in the long run by the deduction from one's wage of the interest paid. This is to advocate one grand spree followed, perhaps, by the deluge. I can conceive of no better means of making effective the prediction that "from him that hath not shall be taken even that [standard of living] which he hath." One of the most vicious aspects of small loan companies lies just in this encouragement to unwarranted expenditure. If this view merits the stoning suggested, some of us will be compelled to take our places by the side of the Stephens of old. Incidentally, it is difficult to reconcile this "advertising [which] today stimulates the desire for a higher standard of living" with a policy designed "to develop thrift through teaching individuals how to handle accounts" mentioned two paragraphs above.

I am glad to see that Mr. Robinson disavows for small loan companies any "welfare" purpose. It so happens that this legislation was sold to Connecticut as a welfare measure. The promoter—and I do not question his integrity—who was responsible for the enactment of the law in Connecticut came to the state and made particular inquiry as to who was the best man in the

legislature to "introduce a welfare measure." And it was largely through the support of the different welfare organizations of the state, marshalled with the skill of a master enthusiast, that the bill was enacted. Time and time again the Russell Sage Foundation support was given as evidence of the welfare objective of the legislation. The proponents of the law have missed no opportunity to avail themselves of the help of welfare groups both in getting the law enacted and in preventing its repeal. If Mr. Robinson reflects the views of the small loan company majority, he can perform a real service in thus removing the irony of having such companies heralded as agencies to promote the welfare of the laboring man.

I share the view of Mr. Robinson that much progress has been made in this kind of loan. Also, I expect greater refinement and a saner solution within "the next fifteen years." It was with such a purpose in view that my article was written, and I welcome the criticism of Mr. Robinson in this light. I agree with him that there will probably be a permanent place in our economy for small loan companies. This does not mean that they should not be purged of the abuses they now perpetrate.

Mr. Shafer has called attention to an obvious error, or oversight, made by me in the discussion of the rate of interest charged on small loans by the American Bank and Trust Company of Bridgeport. In my paper I said that this bank deducted in advance six per cent on loans made. I should have said that the bank deducted a sum of money equal to 6 per cent per annum for the loans made. For example, in the making of a $100 loan payable in four dollar installments over a period of 25 weeks, the bank deducts in advance not $6 but $2.92. If a $100 loan is made payable in 50 weekly installments of $2 the interest actually deducted is $5.83. These deductions are made on the basis of 6 per cent for 360 days. I agree with Mr. Shafer that the interest charged by the banks would be approximately 25 per cent if $6 were deducted for a $100 loan and the borrower repaid $4 a week for 25 successive weeks. His criticism, therefore, is a criticism of my exposition rather than otherwise. I accept this criticism and plead guilty to ambiguity in this respect in my original paper. The Bridgeport bank officials figure that the rate of interest charged, in view of the weekly repayments, is approximately 11.55 per cent per annum. The experience of the bank in this type of loan does show a decided contrast to the 42 per cent (really 51 per cent) charged on similar loans by small loan companies. A recent letter from President Tremain says: "I might say to you—that our Small Loan Department is working out very successfully and is becoming in demand more and more." I am obliged to Mr. Shafer for the opportunity to remove the ambiguity in my original paper.

CLYDE OLIN FISHER

Capital Value Once More

In his recent article, "Capital Valuation and the Psychological School,"[1] Professor Harry G. Brown has vigorously brought forward once more that time-worn problem. He takes issue with the position of such writers as Professors Irving Fisher and Frank Fetter, who hold that capital value can be

[1] AMERICAN ECONOMIC REVIEW, September, 1929, pp. 357-363.

determined solely by discounting the future income of capital goods. He argues, making use of the concept of opportunity cost, that the possible alternative uses of land and labor have a direct bearing on the price paid for already existing capital goods and consequently, that cost of production (or reproduction) affects directly the value of such capital goods. Using his own illustration:

"Nowell is a fisherman. His usual catch is $40 worth of fish a week. His boat, a necessity of his business, is wearing out. He needs a new one very soon. He is, however, a pretty good carpenter. He can build himself a satisfactory boat in a week's time. Kelleher, a dealer, offers to sell him a boat for $100. Nowell and other fishermen similarly situated refuse to pay such a price. Thus the *demand* for Kelleher's boats is affected by the opportunity *cost* to Nowell and to others of building their own boats. Nowell refuses to pay Kelleher $100 for the boat. . . . . What it would cost Nowell to make his own boat (opportunity cost) affects *directly* the amount Nowell is willing to pay for Kelleher's *already-built* boat."[2]

The present writer agrees that costs of production have a direct bearing on capital value, but feels that Professor Brown's analysis, both in his article and in his book, ignores the real heart of the problem so brilliantly analyzed by Alfred Marshall. There is a widespread tendency to smile and poke fun at Marshall's use of the phrases short and long run, but properly understood, these phrases clarify many important economic problems. The present issue is a good example. Marshall's choice of words was unfortunate; but a careful study of his work indicates that his term short run referred to a period during which forces were at work tending to restore an equilibrium lost by a shift in demand (or supply), while a long run period referred to the general tendency towards equilibrium. Thus in a static state, the short run would have no significance, since equilibrium would be constant. Making use of this mental concept as a tool, the correct position for a supporter of the productivity theory of interest, who at the same time believes the distinction between land and instruments of production is valid, should be as follows: Capital value tends in the long run (state of equilibrium) to equal the cost of reproducing the capital, but in the short run (during possible dynamic changes) capital value tends to equal the discounted value of the prospective income. The reason for the latter statement is that for short periods, durable capital goods are fixed in supply and consequently the same principles working in the case of land must apply; changes in demand will affect capital value independent of costs of production at the time. Since the stock of durable capital goods of a specific sort may be large and the shift in demand important, it is possible that the "short run" may be rather long when expressed in years instead of in terms of unstable equilibrium.[3]

To illustrate, during the World War a large number of industries located on the Delaware River in the vicinity of Philadelphia. This brought to the area a great influx of workmen, increasing with great rapidity the population of the city. The available housing facilities were at a premium, and the

[2] *Ibid.*, pp. 358 and 359.

[3] This is the heart of Marshall's doctrine of quasi-rents. It is regrettable that it is so often neglected, for it is vital to a proper understanding of the operation of static principles in a dynamic society. See, Marshall, *Principles of Economics*, Book V, chapters VIII and IX, especially the latter.

effect of the shortage was immediate and serious. A real increase in demand took place under conditions of fixed supply—a perfect illustration of Marshall's quasi-rent principle. Prices of real estate soared. *The option to replace the capital so confidently assumed by Professor Brown did not exist for it took years for the shortage to be satisfied.* The value of the homes available for the time being was determined not by the costs of reproduction, but by capitalized value of the discounted income of the properties. In the long run equilibrium was restored and cost of production again became the determining factor; but for short periods the discounted future income was the dominant influence at work. Today the opposite situation is true. Philadelphia caught up in building, but the loss of population on the closing of the war industries, combined with a too optimistic building program, brought about an over-supply and today it is difficult to secure a price for real estate that covers the costs of reproduction.

Professor Brown's illustration of a ship built too large to enter the lake in which it was intended to be placed in service, does not meet this issue; he is quite right in considering such a situation exceptional and unimportant. But the importance of discounting future income in the short run is not to be ignored.

To sum up, the weak line in Professor Brown's reasoning rests in his assumption that the option to reproduce capital *can be made instantly effective.* Costs of production govern only in the long run; and, in truth, that is all the productivity theory, when carefully stated, ever did claim. "That which is rightly regarded as interest on 'free' or 'floating' capital, or on new investments of capital, is more properly treated as a sort of rent—a *quasi*-rent—on old investments of capital. And there is no sharp line of division between floating capital and that which has been 'sunk' for a special branch of production, nor between new and old investments of capital; each group shades into the other gradually. And thus even the rent of land is seen, not as a thing by itself, but as the leading species of a large genus; though indeed it has peculiarities of its own which are of vital importance from the point of view of theory as well as of practice."[4]

William W. Hewett

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The Tax on Capital Net Gains

The view that large taxpayers do not take profits in stocks because of the tax on capital net gains was championed by the National City Bank in a special edition of its bulletin issued April 18, 1929. In this number, the bank contends that the tax on capital net gains is in large part responsible for the then present (and still present at this writing) credit difficulties. This tax "has created artificiality in the security markets, in the credit structure and in interest rates. It has introduced scarcity values in stocks that have spelled high prices and it has created an enormous increase in the loan account. Under these tax laws and particularly with the new tax operating as it does in the higher brackets, investors and speculators who have large profits in securities have been and are unwilling to liquidate and take profits, but go on holding these securities, leaning on the banks in order to do so." As a remedy, the bank suggests the immediate repeal by Congress of the

[4] Alfred Marshall, *Principles of Economics*, 8th ed., p. 412.

income tax provisions taxing capital net gains and giving credits for capital net losses.

The question whether large taxpayers do not take profits in stocks because of the tax on capital net gains may be examined best in the light of the two factors which affect the advantages or disadvantages of taking profits and which are, therefore, most closely related to it, the provisions of the income tax in respect to capital net gains and capital net losses, and the trend of stock prices.

The capital net gain and capital net loss provisions of the income tax apply only to capital assets held more than two years. Taxation under the capital net gains provision is optional, not compulsory. Any taxpayer (other than a corporation) may choose to pay 12½ per cent on his capital net gains instead of the normal and the surtax rates. Deduction of a capital net loss is limited to 12½ per cent of the loss. This deduction is compulsory, not optional. The taxpayer first computes the tax on his ordinary net income and then from this subtracts 12½ per cent of his capital net loss. But the deduction of the 12½ per cent is limited by a qualification that it may not be used to decrease the amount of any tax which would be paid on net income computed without reference to this provision. However, it may operate to increase the amount paid and in the case of large taxpayers may actually result in the payment of a tax where the total capital loss exceeds other net income.

During the last few days and possibly weeks immediately prior to the expiration of the two-year period, the capital net gain and loss provisions of the income tax clearly give some taxpayers an incentive to sell stocks and others an incentive to hold them. A taxpayer who is holding stocks at a loss may deduct the full amount of his loss if he sells during this time. If he waits, he may deduct only 12½ per cent; and, on account of the qualification that this deduction may not operate to decrease any tax on his net income which would be payable if computed without reference to this provision, he may not be able to deduct even this percentage of his loss. A taxpayer who has a profit on stocks and whose normal and surtax rates exceed 12½ per cent has an incentive to hold his stocks until the end of the two-year period; for, if he sells then, he may pay a tax of only 12½ per cent on his gains.

Once stocks have been held beyond the two-year period, it is difficult to see how the capital net gain and the capital net loss provisions of the income tax can possibly operate to influence large taxpayers not to take profits. If these provisions have any effect it would seem that they would influence large taxpayers to sell, not to hold their securities. This is because it may well be doubted whether in an enterprise as risky as stock speculation a 12½ per cent deduction for losses is a proper offset for a 12½ per cent tax on gains. In such an enterprise a penalty imposed on losses is probably more effective than a penalty imposed on gains.

A few illustrations will make clear the penalty on losses imposed by the compulsory provision that only 12½ per cent of a net capital loss may be deducted. Let it be supposed that a single man without dependents has an ordinary net income of $100,000 and a capital net loss of $102,000. His tax would be computed as follows:

Ordinary net income	$100,000
Less exemption	1,500
	$ 98,500

Normal tax:		
1½ per cent on first $4,000	$ 60.00	
3 per cent on second $4,000	120.00	
5 per cent on remainder	4,525.00	
Total normal tax		$ 4,705.00
Surtax on $100,000		11,660.00
Total		$16,365.00
Less deduction of 12½ per cent of capital net loss of $102,000		12,750.00
Total tax due		$ 3,615.00

Thus this individual though actually sustaining a loss of $2,000, the difference between his ordinary net income and his capital net loss, is obliged to pay a tax of $3,615.00.

Suppose that another individual has an ordinary net income of $200,000 and a profit of $100,000 in stocks which cost him $300,000 and which he has held for more than two years. If he chooses to continue on the long side of the market, he may hold his stocks or he may sell them and buy others.

Suppose this individual decides to hold his stocks for another year and at the end of this time sells them for $200,000, a loss of $100,000. Assuming that he is single and without dependents, his taxes for the first year, the one in which he makes his decision to hold, will be $41,365; for he must pay normal and surtaxes of $16,365 on the first $100,000 of his ordinary net income and of $25,000 on the second $100,000. These taxes will remain the same for the second year, except that, having sold his stocks, he will be entitled to a deduction of 12½ per cent of the $100,000 loss which will reduce their total to $28,865. Thus, for the two years, he will have received ordinary net income totaling $400,000, will have paid taxes aggregating $70,230, and, having lost $100,000 of his capital, will have $200,000 left.

On the other hand, suppose that this individual decides to sell his stock and to invest the proceeds in other issues and that he sells them a year later for $200,000, a loss of $200,000. His taxes for the first year will be $53,865 ($41,365 on his ordinary net income plus a tax of $12,500 on his capital net gain of $100,000). His taxes for the second year will be zero; for he will be able to deduct the entire loss of $200,000 from his ordinary net income of $200,000, leaving him no taxable income. Thus, if he chooses this alternative instead of the other, he will have received the same ordinary net income of $400,000 during the two-year period; he will have the same amount of capital, $200,000, left; and he will have paid $53,865 in taxes instead of $70,230. The difference of $16,365 in taxes may be regarded as the penalty for taking a loss under the 12½ per cent provision and, therefore, as the incentive to realize profits on stocks held for more than two years and to risk losses on stocks only when 100 per cent of these losses may be deducted in the income tax return.

The other factor which affects the purchase and sales policies of owners of stocks, one which is far more important in its effects than the capital net gain and capital net loss provisions of the income tax law, is the trend of stock prices.

In a period of rising stock prices, the seller of a stock is likely to see its quoted price rise to a higher level than that at which he sold it. Than this, few experiences are more exasperating to the long pull speculator, the only type of speculator with whom this discussion can logically be concerned.

Whether he remains out of the market or whether he buys some other stock, the experience of watching "his" stock rise after he has sold it is most distasteful. If he is out of the market, he misses the entire profit from the rising price trend. If he is in it, as the holder of some other stock, he can see most clearly how he could have held this stock and the other, too, and have reaped the profits from the rise of both. True, he sees this after the fact of sale, not before; but he sees it, and this is the important point. The inevitable effect of such an experience is to make the long-pull holder of stocks more hesitant to sell. If he must buy a stock, he is inclined to borrow on the security of the enhanced value of his own stock and to hold both stocks. The longer the rising trend of stock prices continues, the more certain it is that a psychological "set" against selling will be built up in the mind of the long-pull speculator. He will be more and more inclined to hold, and, if he must buy, to borrow.

During the last few years, the trend of stock prices in this country has been upward. Authorities differ on the place which this market occupies in the history of bull markets, but all agree that an extraordinary bull market has been in progress for a number of years. Subject to occasional sharp reactions, the trend of stock prices, however measured, has been strongly upward. On the whole, in this market, the penalties for selling stocks held for the long pull have been severe and the rewards for holding them and buying others have been great. In such a market, it would be most surprising if long-pull speculators had liquidated their stocks whenever they wished to buy others.

When the crest of a rising market has been passed, and a long period of falling stock prices has begun, the long-pull holder of stocks bought during the bull market is clearly at a disadvantage. He has every incentive to sell and to remain out of the market, or, if he must speculate in stocks, to change his type of speculation to one more suited to a bear market. Once such an operator recognizes that the trend of stock prices is down, he will sell his stocks with the possible exception of a few which he may hold because of unusual conditions. The existence of a 12½ per cent tax on his gains will not prevent him from selling. It is far better for him to sell and to net, clear of the tax, 87½ cents out of every dollar of his profits than it is to hold until his profits have shrunk and a possible loss is incurred, only 12½ per cent of which may be deducted in his income tax return.

M. Slade Kendrick

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General Works, Theory and Its History

The Useful Art of Economics. By George Soule. (New York: Macmillan. 1929. Pp. 250. $2.00.)

During the past ten years there have appeared in America a very considerable number of books which view the subject of economics, not as a matter of cold laws and formal logic, but as a study of human activity and behavior with a view to control. The title of this book accurately indicates that it is intended as an addition to this list of volumes. "It is clear," says the author, "that the system of 'economic laws' with which the classical economists provided us was really an elaborate set of hypotheses." The book is written, therefore, for the purpose of expounding some of the reasons to hope that we are not "forever helpless in the grip of circumstances."

The approach is to view our national economy as one might a single industrial plant. This approach leads logically to a series of chapters which may be said to deal with economic materials and organization. These include "A look at the national plant," "Keeping the plant running smoothly," "Can the plant make more goods?" "Can the plant produce what we really want?" and "The plant inside out."

Concluding this section, the book shifts—not unlike the old-fashioned texts—to the discussion of a series of problems. An essential difference is that the author limits himself to "Some specially sore spots," agriculture, the coal industry, the textile industry and housing each coming in for several pages of discussion. The problems of several of these activities are treated as examples of the failure of the competitive system. International trade with emphasis on the debt problem receives a chapter. What might well be classed as a final section is concerned directly with "control."

The chief value of the work should be to the general reader who knows a good deal about economic life but little about the way in which economists talk about it. It assumes somewhat too much and is at the same time somewhat too incomplete to be of great value as an introductory text; there is little that is new in it for the "modern" type of economist whose social outlook is one of functions, devices and control; the economist of classical mold will regard it as superficial and lacking in "rigor." There are indeed places at which many readers will wish for a little sharper and more thorough treatment. They will wish that the author had made clearer the basis of some of his observations. For example, he says on page 23, "Most coal is now burned raw, just as it is taken from the ground. When we get the plant well organized, that will

not be the case." One cannot but wonder whether the author means that the present "poor organization" in this respect is due to a lack of knowledge of by-products, the coking process and the merits of coke by most directors of combustion, whether the consumer persists in this faulty use in spite of his knowledge, or whether it really is more economical generally to use raw coal. So too in discussing the innocence of the buying consumer (in chapter 5), the author, as the reviewer sees it, falls too easily into an assumption that what "we really want" is readily determined and easily distinguished from what we want as the result of "a combination of other people's opinions, the impressions he receives, consciously and unconsciously from competitors, advertising and salesmanship, and inferences from an inadequate experience." It seems also that in dealing with this subject the writer, sometimes confuses waste with cost and is occasionally willing to submit personal standards as adequate for all. The difficulties in this realm of economic life and the achievements already made are not so cleanly handled as are other sections of the book.

The general approach of the book agrees so thoroughly with all of the reviewer's prejudices that he can only praise it; the chapter on "Some specially sore spots" contains unusually clear and simply presented analysis; the book as a whole has an ease, accuracy and flexibility of phrasing and a readability which most writers must envy.

Leverett S. Lyon

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NEW BOOKS

Bertolino, A. *Bacone e l'economia.* (Siena: Circolo Giuridico della R. Università. 1929. Pp. 64.)

Bibby, J. P. *Unemployment: an analysis and suggested solution.* (London: P. S. King. 1929. Pp. viii, 136. 5s.)

Brocard, L. *Principes d'économie nationale et internationale.* Vols. I and II. (Paris: Librairie du Recueil Sirey. 1929. Pp. xv, 503, 697.)

Cannan, E. *A review of economic theory.* (London: P. S. King. 1929. Pp. x, 448. 16s.)

Carey, R. L. *Daniel Webster as an economist.* Columbia studies in history, economics and public law, no. 313. (New York: Columbia Univ. Press. London: P. S. King. 1929. Pp. 220. $3.50.)

Deibler, F. S. *Principles of economics.* 1st ed. (New York: McGraw-Hill. 1929. Pp. xvi, 552. $3.)

Fick, H. *Transferproblem und Transfertheorie: ein Beitrag zur volkswirtschaftlichen Theorie der deutschen Reparationen.* Abhandlungen des wirtschaftswissenschaftlichen Seminars zu Jena, Band XX, Heft 1. (Jena: Fischer. 1929. Pp. v, 66. Rmk. 3.)

George, H. *Progress and poverty: an inquiry into the cause of industrial depressions and of increase of want with increase of wealth. The remedy.*

(New York: Robert Schalkenbach Foundation, 11 Park Place. 1929. Pp. xx, 571. $1.)

A new edition celebrating the fiftieth anniversary.

HAMILTON, W. H. *Economics.* Reading with a purpose, no. 5. (Chicago: American Library Assoc. 1929. Pp. 48. 50c.)

HEIMANN, E. *Soziale Theorie des Kapitalismus: Theorie der Sozialpolitik.* (Tübingen: Mohr. 1929. Pp. viii, 234. M.12.)

HOBSON, J. A. *Economics and ethics: a study in social values.* (Boston: Heath. 1929. Pp. xxxi, 489. $4.)

LAIRD, J. *The idea of value.* (New York: Macmillan. London: Cambridge Univ. Press. 1929. Pp. xx, 384.)

MARTIN, P. W. *Unemployment and purchasing power.* (London: P. S. King. 1929. Pp. vii, 85. 4s. 6d.)

MICHAELIS, A. *Die Quantitätstheorie als Grundlage der Konjunkturforschung.* (Jena: Fischer. 1929. Pp. vi, 170. Rmk. 16.)

OSWALT, H. *Grundzüge der Geldtheorie: ein Nachtrag zu den Vorträgen über wirtschaftliche Grundbegriffe.* (Jena: Fischer. 1929. Pp. v, 78. Rmk. 4.)

RUEFF, J. *From the physical to the social sciences: introduction to a study of economic and ethical theory.* Translated by HERMAN GREEN. (Baltimore: Johns Hopkins Univ. Press. 1929. Pp. xxxiv, 159. $2.)

RUTLEDGE, R. M. *Everyday economics: a case and problem book.* (Boston: Houghton Mifflin. 1929. Pp. xxi, 457. $2.25.)

STOK, W. *Geheimnis, Lüge und Missverständnis: eine beziehungswissenschaftliche Studie.* (München: Duncker & Humblot. 1929. Pp. vi, 90. M. 4.)

VAUGHAN, D. M. *Buyers and makers: an introduction to social economics.* (New York: Longmans Green. 1929. Pp. xv, 126. 80c.)

This book of 123 pages in pocket size was written by a woman for women untrained in consumption economics. Without technical terminology it describes entertainingly what money is and the work it does, the economic and social influences of domestic and foreign trade, the economic effects of expenditures for luxuries and amusements, the social expenditures through taxation, and the wisdom or folly of savings. Since Miss Vaughan is British, her whole story is told in British terms, and contains an unconcealed plea both for free trade and consumption guided to support the economic structure of the British Empire. Wherever the book deals with straightforward economics, it is valuable to women of any nation; but in the portions devoted to patriotic pleas it has scant interest to women living under flags other than the Union Jack.

MALCOLM KEIR

WARD, H. F. *Our economic morality and the ethic of Jesus.* (New York: Macmillan. 1929. Pp. ix, 329. $2.50.)

The author's thesis is that modern capitalism is not in accord with the ethic of Jesus. "The world is too much with us . . . ." might have been a fitting keynote. Yet that would have been stating the author's views too mildly; for he has delivered a broadside at capitalism.

In the first part of the book, one finds a rebellion against the doctrine of laissez-faire of the classical economist, the author contending that "the

inevitable result of competition for profit is some kind of monopolistic control." He says further: "It is agreed that in a profit economy monopoly means diminution of service and increase of its cost."

Next, the subject of profits is discussed. He believes that "pure profits" have reached enormous sums. Underlying this discussion is the philosophy of Karl Marx and a labor theory of value. Further on, in the discussion on property, one finds a leaning towards Proudhon's thesis that "profit is theft." The way out, he holds, is public ownership of monopolies, and ownership and control of industry by labor: "Regulation of natural monopolies and public utilities . . . . is admittedly breaking down." Likewise: ". . . . the commendable ideal of getting capital and labor together is a vain hope and well-meaning exhortations to that effect are but windy words, unless they mean getting together to abolish the basic antagonism of economic interest that divides owner and worker under the wage system."

With reference to interest the author says: "The issue boils down to the question of interest and its validity." He then proceeds to demolish the abstinence theory of interest. Here too the labor theory of value creeps out.

Throughout the discussion a wide range of topics is treated in a hasty but final fashion. Rural life is pictured as decaying. Tenancy is said to be remarkably on the increase, although the census figures tell a different story. The federal reserve system is blamed for the depression in agriculture. The veto of the McNary-Haugen bill is held responsible for the continued depression.

Toward the end of the book the author reveals his adherence to the Marxian thesis. "The prevailing attitude to this phenomena in the United States," he says, "is that of the ostrich." Marx's prediction, he holds, is bound to be fulfilled unless our economic morality is revolutionized. Recognizing, as did Engels, the fact that the farmer is an obstacle in the way of the Marxian interpretation, he states: "The farmers, who have been the backbone of our individualism and the political mainstay of the capitalist economy, are beginning to lose the capitalistic mind. If in the staple crops they become wage-earners for corporations, and in the smaller crops are increasingly unable to fulfill for their children the American desire for education, there can be no question about their psychology."

The work is distinctly critical but not in a constructive way. It is a plea for socialization but lacks the constructive features of Pound's *The Spirit of the Common Law* and Commons' *Legal Foundations of Capitalism.* It reminds one of a single side of a debate.

E. A. Stokdyk

Economic History and Geography

Life and Labor in the Old South. By Ulrich B. Phillips. (Boston: Little, Brown & Co. 1929. Pp. xix, 375. $4.00.)

This work, which was awarded the prize of $2,500 offered by Little, Brown & Company for the best unpublished work on American history, gives fresh evidence of Professor Phillips' industry in the field of the

antebellum South. His talent for realistic detail is everywhere apparent; and back of this, of course, is his ingenuity and perseverance in digging out original matter from newspapers, farm journals, plantation records, private correspondence, bills of sale, and diaries, to mention some of his sources. He has made himself the foremost student of the institution of negro slavery in America, and has scarcely less information on other topics in the South's past—transportation, personalities, social habits and culture.

The volume presents material similar to that included in his *Plantation and Frontier* and *American Negro Slavery;* but it differs from the first by including, now, constant interpretation, and from the second in embracing a somewhat wider view of Southern life. Attention is given to the plantations of the Southwest and to the poor whites and small farmers—both of them needed contributions. The author promises two volumes to follow this, one giving the course of public policy to 1861, the other bringing the social and political history on through the Civil War and after. The many photographs and maps in the book—pictures of slave quarters and planters' houses, cotton presses and gin stands, and maps showing arrangement of fields—preserve a record that is fast disappearing.

Professor Phillips is fonder of particularizing than of summarizing. This cannot be because he has not sufficient information at hand. Every chapter proves the contrary. I am mindful of his care to show the Old South as a natural growth, which in its inevitableness obliterated moral judgments. I do not mean that the reader can claim to ask him, as a student did of an instructor recently, whether the French Revolution was "right or wrong." But one would like to know from him, after a recital of detail, what he thinks of the expediency of the scheme of the Old South as compared with other civilizations. Writers, Professor Phillips sometimes among them, have called in question Olmsted's motives as an observer of the slavery system and its concomitants. They may be correct in thinking he looked for the darker side. But Olmsted had a faculty of pointing a moral as well as adorning a tale, and this was as satisfying as it was legitimate. The present volume, popular and pleasant in statement, is not designed as a source book; and yet the reader wishes that he were shown fewer leaves and more forest.

Olmsted felt, as Professor Phillips evidently does, that he knew the South too well to condemn it, yet he did not refuse to characterize it. And he found it lacking in enjoyment, productivity and amenity for the average inhabitant, black and white. Not that the North failed to show many of the same lapses as the South, and the South many of the same excellencies as the North (as Professor Phillips shows); yet the added

light which every passing year sheds on the old régime serves to establish the general conclusion.

The failure of the Old South lay in the fact that it dammed itself against new currents that were stirring in the national stream—the growing importance of free labor, political unity, and industrialism. These eventually became so strong that they broke over and through the buttress. What ailed the Old South is made apparent by study of the efforts, mostly unsuccessful, of a few to establish manufactures there. In the present book Professor Phillips gives only incidental attention to these attempts. But these few factories—the thought that lay behind them, the difficulties which they encountered—were like rockets that lit up the landscape. Probably one learns less about slavery from the Carters of the Northern Neck, James Henry Hammond, Edmund Ruffin and the letters of overseers than from the bitter reflections of such a manufacturer as William Gregg of South Carolina. Gregg took arms against a sea of troubles; and though he did not by opposing end them, he exhibited what they were. And nowadays the successors of Gregg, who have built a New South ever more different from the old, have given us the best vantage point from which to view "Old Marster," Cuffee, the sand-hiller and the frontier clearing. It is seen now that the fatal lack of the Old South (if one tries to put it in a single word), was in capacity for coöperation and social integration. The very devotion to a staple agriculture, so far from promoting unity through a regional sameness, condemned the South to be loosely knit economically. Diversification, on the other hand, was the secret of approximation.

The Careys of Philadelphia, preaching the trinity of agriculture, internal commerce and industry, were right about the South as about the North, only Southerners did not honor such prophets abroad or in their own country. A later generation, jarred loose from old habits, has been wiser or, if one wishes, more fortunate. We see today, with the South turning out eight billion dollars' worth of manufactured products, that what has been lost in peculiarity has been gained in abundance. What if the business booster, blatant and in bad taste, and the up-country Methodist, with sumptuary proclivities, have hushed elegant conversations in Charleston drawing-rooms and turned to the wall the old picture of moonlight and magnolias? They have brought schools, roads, cash wages, wider distribution of property ownership, and the basis for mutual respect between the races. The mammy's crooning lullaby persists in our ears as a pleasing recollection, but only if the curtains are drawn against the fading light that fell on the workaday world of master and slave.

BROADUS MITCHELL

The Johns Hopkins University

Recent Social Changes in the United States since the War and Particularly in 1927. Edited by WILLIAM F. OGBURN. (Chicago: University of Chicago Press. 1929. Pp. xiii, 230. $3.00.)

The rapidity with which social transformations have occurred during the last decade and the increasing, if still much too meager, amount of quantitative material available for the measurement of the relationships of social phenomena are both responsible for the present popularity of the task of stock-taking in the field of social interests. With our supply of statistical material increasing to the extent that some of it is likely to remain undigested, and with specialists encountering difficulty in keeping track of major developments in fields other than their own, volumes summarizing in rapid fashion the more important social and economic changes tend to be hospitably received by students of the social sciences.

Social Changes, 1927, a reprint of the articles that appeared in the May, 1928, *American Journal of Sociology,* is the first of a contemplated annual series, the second number of which has already appeared in the May, 1929, issue of the same journal. Notwithstanding that a majority of the topics treated in the present volume are included elsewhere, as in *Recent Economic Changes in the United States* and in the *American Yearbook,* few readers will dispute the need for the new series. The *American Yearbook* touches upon the topics treated in *Social Changes* in more abbreviated fashion and is not limited to social changes; while *Recent Economic Changes in the United States,* on the other hand, is both more intensive and more limited in scope. An annual inventory of changes in the fields of population, natural resources, inventions and discoveries, production, foreign trade and investments, foreign policy, labor, wages, employment, social legislation, public health and sanitation, communication, group and community organization, rural life, and government need not feel itself to be an intruder because of the discussion of these topics elsewhere. It is entirely probable that some changes in the list and arrangement of topics will be made in the successive numbers. A summary statement of changes in the size and in the personal, functional, and geographical distribution of the national income might be suggested as a desirable supplement to the chapters on wages, production, and rural life. But the careful work of the contributors to the first volume, the high average level of the contributions, and the reliable character and competent handling of the statistics used suggest that the following annual volumes will be watched for eagerly.

The composite picture given by the nineteen chapters includes some striking contrasts. While the general tone of the articles is optimistic, all that is portrayed is not milk and honey. Production has increased enormously in recent years; real wages are appreciably higher than they

were after the post-war deflation; social legislation has recovered in part from the post-war reaction against state interference; some 103 significant inventions and discoveries are listed for 1927 alone; community planning and organization have made strides; the spirit of unrest in the educational world produced some wholesome innovations. On the other hand, the world increase in the physical output of manufacturing has been accompanied by a decrease in the number of factory employees; farm wealth in fifteen years has increased only about twenty per cent as much as the national wealth; bituminous coal still suffers from overdevelopment, chaotic labor conditions, and limitations upon market expansion; the problem of depopulation of the rural areas has become more acute; the necessity for a more rapid increase of merchandise imports as compared with exports has been only postponed by the unprecedented importance of the invisible items in the current trade balance and by the fact that the creditor position of the United States is increasing less rapidly than is generally supposed; the church has not adjusted itself to the problem created by the new source of urban population from rural America; the foreign policy of "protecting American interests" has as firm a foothold as ever. Yet the editor of the volume finds comfort in one generalization which he believes stands out sharply. "It is that there is continuity in cultural change. The principle of continuity in social change is very reassuring. . . . . With more complete statistics and with better measurement we will attain fuller knowledge of what is happening to us and where we are going. Only with these shall we be in a position even to begin to speak of control. The developments along these lines are most encouraging, as the studies [in this volume] show."

ROYAL E. MONTGOMERY

Cornell University

Industrial Tyneside. A Social Survey Made for the Bureau of Social Research for Tyneside. By HENRY A. MESS. (London: Ernest Benn, Ltd. 1928. Pp. 184. 10s. 6d.)

The Clothing Workers of Great Britain. By S. P. DOBBS. (London: George Routledge & Sons. 1928. Pp. xiv, 216. 10s. 6d.)

Both these books add to our knowledge of post-war England, and provide a much needed supplement to the more general picture available in the Balfour Commission and the Liberal Committee Reports or in Carr-Saunders and Jones' excellent *Social Structure of England.* In a sense, also, the two books supplement each other; for Dr. Mess concentrates upon a group of towns, while Mr. Dobb analyzes conditions in a group of trades scattered all over the country.

Dr. Mess, as director of the Bureau of Social Research in Newcastle

has produced an analysis of economic and social conditions in Tyneside that is comprehensive in scope, thorough and scholarly in its accumulation and presentation of material, and stimulating in commentary and suggestion. The picture he reveals is gloomy in the extreme. The Tyneside area, comprising Newcastle and surrounding towns with a total population of over 825,000, is notoriously one of the most depressed districts in Great Britain today. Unemployment is, and has been for the last eight years, exceptionally severe; and the dependence of the district upon the two main industries of coal-mining and shipbuilding gives little hope for revival in the immediate future. Poverty is widespread, while the daily contract of employment in shipbuilding makes the chance of regular work almost as precarious as among longshoremen. The population is probably the worst housed in the country: thirty-five per cent of the population live more than two to a room (the corresponding percentage for Great Britain as a whole is 9.6), while in two of the towns studied the percentage was over forty. The birth rate is the highest in Great Britain, reaching 30.7 per 1,000 in Hebburn in 1921 as compared with the national average of 19.9. As is inevitable in a district so long depressed, health is poor; "the amount of tuberculosis is appalling;" yet the very poverty of the district prohibits adequate expenditure on hospitals or social services. Standards of education are low, and physical surrroundings are for the most part squalid and ugly.

More and more the towns of the region are becoming purely working class towns, professional men and factory owners living some distance away in a different administrative district. Apart from sociological considerations, this is a serious fact in Great Britain where so many of the social services are financed out of local taxation. Particularly in the case of poor relief for which more and more are being forced to apply as they exhaust their unemployment benefit, it means that a district already suffering through a loss in earning power is burdened with the upkeep of its own unemployed. As a result, local rates are a heavy burden in precisely those areas with the least ability to pay, while the districts of large estates and wealthy householders escape. Although the new Rating act will to some extent alleviate this inequality, the real problem remains so long as unemployment is treated as a local and not as a national responsibility.

Less depressing conditions are revealed by Mr. Dobbs, who traces the recent development of the clothing trades. The trades themselves are of particular interest, partly because of the rapid change in organization which is even now in progress and which is turning them from skilled and small scale industries into semi-skilled factory employments, and partly because as a group of trades they have been subject perhaps more completely than any others to the minimum wages fixed with the Trade

Boards acts of 1909 and 1918. In tracing the changes both in organization and in the conditions of the workers, Mr. Dobbs is able to report that "the clothing operative can no longer be regarded as the Cinderella of modern industry." Homework, the curse of these trades some thirty years ago is gradually dying out, while workers' organization and state intervention is raising the standard of working conditions and wages. There is still much progress to be made; and, as in other countries, organization is retarded by bitter warfare between rival unions. Mr. Dobbs has concentrated largely upon the trade itself, its localization, and technical and formal organization, and has perhaps paid too much attention to the underlying economic influences determining localization, at the expense of a more detailed discussion of the policies of employers' and workers' organizations. His method of arrangement also involves some measure of repetition.

Different as they are in approach and subject matter, both books point the same moral. They reveal the effects of a failure to cover social costs at a time of industrial expansion. The high grade clothing industry which is today suffering from a shortage of skilled labor is but paying the penalty of obtaining its labor supply in the past at a wage which was less than "fair" in the Marshallian sense. The flow of labor has continued until recently, partly from immigrants trained abroad, and partly from young workers trained by the small country tailor who carried on much of his work with apprentice labor employed at an incredibly low wage. The immigrant supply was cut off by the Act of 1911, while the small country tailor is now disappearing beneath the pressure of the competition of the large factories, and of the Trade Board which insists on a minimum wage to apprentices.

In Tyneside during the period of rapid development which accompanied the naval rivalry and big shipbuilding period after 1850 the shipbuilding industry was clearly failing to cover its social costs; for it contributed little towards social expenditure such as town planning, education, sanitary and housing facilities inevitably connected with the growth of an expanding industrial region. Today when the need for these services and facilities is greatest the area is too poor to make good old deficiencies. Moreover the situation in Tyneside is aggravated by the absence of provision for slack periods by those who were responsible for calling into being a heavy overhead of both capital and labor to meet a demand that was at best spasmodic, and by the extreme degree of localization of industry in the district, which has practically only two industries, and which has thus no alternative employments capable of absorbing its residents, when, as now, both staple industries, mining and shipbuilding, are depressed.

E. M. Burns

Columbia University

Strukturwandlungen der Deutschen Volkswirtschaft. 2nd ed. Edited by BERNHARD HARMS. Vols. I and II. (Berlin: Reimar Hobbing. 1929. Pp. xii, 524; viii, 509.)

This work consists of forty papers by some thirty authors, chiefly professors of economics in German universities or commercial and technical high schools and administrative officials connected with business organizations and the government. The papers were originally prepared for the 1927 meeting of the *Deutsche Vereinigung für Staatswissenschaftliche Fortbildung,* a national association for the discussion of problems in national economy. The papers are divided into nine sections, the topical headings of which indicate roughly the subject matter of the two volumes: General structural (economic) changes; agriculture; industry; the wage worker; small manufacture (Handwerk); trade; transportation (Verkehr); the money market (including one paper on the Reichsbank); and public finance. An extensive bibliography follows the text of the second volume.

The general theme of the work is given by Professor Harms in his introductory paper, *Das neue Deutschland im neuen Europa.* The object of the book is to take stock of Germany's present economic position. In most instances the papers appear to have been written for the general reader rather than the specialist, although some are technical, for example, Professor Flechtheim's "Neue Rechtsformen industrieller Zusammenschlüsse" and Professor Meyenberg's "Rationalisierung der technischen Betriebsorganisation"; and some are theoretical, for example, Professor Schumpeter's "Der Unternehmer in der Volkswirtschaft von Heute," and Dr. Hahn's "Kreditprobleme der Gegenwart," which is chiefly concerned with the cause and the possibility of control of the business cycle.

The economic difficulties under which Germany labors at the present time are, as is well known, chiefly the results of her position as loser in the war. The war impaired her capital and deprived her of trade relations and of most of her merchant shipping, while the terms of the peace further reduced her ocean shipping, deprived her of valuable territories rich in natural resources, and imposed the burden of reparations. These losses have had an oppressive effect upon her productive power and upon her national income, though the latter appears to have regained the pre-war level.

Another difficulty—a more complex one— resulting from the war and the post-war upheaval has been the dislocation of economic relationships both within the nation and between it and the rest of the world. The loss of coal fields is one example. Another is the loss of foreign trade and shipping. Before the war Germany was organized industrially to

produce large amounts of goods and services for export. She depended on imports for much raw material and food. Her population was becoming increasingly urban and unable to sustain itself satisfactorily without foreign trade. Since the war she has been confronted with the problem of reëstablishing a new economic equilibrium to replace the old one which was partly destroyed by the war. It must not be supposed, however, that the problems of readjustment are entirely the results of the war. The development of manufacturing in countries where the products of European industry formerly found their markets and the growing competition of the United States are movements which were only accelerated by the decline of European exports during the years 1914 to 1919. German agriculture, like that of the United States, as shown by the papers of Professors Aereboe and Beckmann, is in difficulties because of the world-wide depression in that industry, lack of suitable credit facilities and the backwardness of the methods of the average farmer. The need for readjustments in merchandising and in public finance are likewise largely the results of economic progress.

The measures that are suggested and are being taken to bring about better adjustments are, of course, varied and too numerous to be even enumerated in this note. "Rationalization" in industry and trade is one method by which the nation is reëstablishing a new equilibrium. American business methods and factory management are being employed. The merchant fleet, which totalled 5.2 million tons in 1914, and was second only to England's, has now been rebuilt with the aid of government subventions to a tonnage of over three millions. Yet Germany's position as measured by tonnage is far inferior to that of the United States and is even somewhat lower than that of France, Japan, and Italy.

These essays are worthy of the attention of the American reader because they present sketches of the present condition of nearly every phase of economic life in Germany and because they represent the opinions of a large number of students of economics in that country. On the other hand, if one is seeking exhaustive research reports on the different topics treated or a well-coördinated study of economic conditions he will not find it in this work. These were not the objectives for which the papers were prepared.

F. B. Garver

University of Minnesota

NEW BOOKS

Bhandarkar, D. R., editor. *India.* The Annals, vol. CXLV, part II. (Philadelphia: American Acad. of Pol. and Soc. Science. 1929. Pp. iv, 203. $2.)

Blaisdell, D. C. *European financial control in the Ottoman Empire: a*

study of the establishment, activities and significance of the administration of the Ottoman public debt. (New York: Columbia Univ. Press. 1929. Pp. x, 243. $3.)

The author has lived three years in the Near East, and since his engagement at Columbia University has been given opportunity for research in the archives of Constantinople.

BRIDGES, T. C. and TILTMAN, H. H. *Kings of commerce.* (New York: Crowell. Pp. 288. $3.)

CLARK, V. S. *History of manufactures in the United States.* Vol. I. *1607-1860.* (New York: McGraw-Hill for the Carnegie Institute of Washington. 1929. Pp. xi, 607. $15, per set of 3 vols.)

This volume, which originally appeared in 1916 and was reviewed in the AMERICAN ECONOMIC REVIEW, vol. VII, June, 1917, pp. 390-394, was then the second of a series on American economic history undertaken by the department of economics and sociology of the Carnegie Institution of Washington. Immediately recognized as the best résumé of our early manufacturing history yet attempted, it has remained the standard work on the subject to date. For several years, unfortunately, it has been out of print; but with a continuation of the history from 1860 to 1928 the earlier volume has been reprinted. The new edition of the material on the period 1607 to 1860 is substantially as it originally appeared. With the exception of several items in the bibliography (now placed at the end of volume III), an occasional extra footnote, and several new sentences in the chapter on the manufacture of metals, there appears to be little change. The format is the same and the index has been retained at the end of the first volume. The new edition is essentially a "reprint" rather than a "revision."

If no changes whatsoever had been made, the importance of keeping this book in print would have justified a new edition. Furthermore, in spite of the fact that a considerable amount of monographic material has appeared in the twelve years since the book was first published, there is little which would force a modification of the general conclusions. On the other hand, additional information is becoming constantly available, and it is to be hoped that the author will some day see fit to enlarge this already invaluable volume.

H. U. FAULKNER

COLE, G. D. H. *The next ten years in British social and economic policy.* (London: Macmillan. 1929. 15s.)

DUBOIS, L. *The French Washington and London agreements and the Dawes plan: an emendatory survey.* (Paris: Union des Intérêts Economiques. 1929. Pp. 87.)

EPSTEIN, M., editor. *The statesman's year-book. Statistical and historical annual of the states of the world for the year 1929.* (New York: Macmillan. 1929. Pp. xxxii, 1448. $7.50.)

FAIRBANKS, H. W. *Southern California, the land and its people: a reader for beginners in geography.* (San Francisco: Harr Wagner. 1929. Pp. 363. $1.50.)

FLÜGEL, F., editor. *Documents relating to American economic history: selections from the official reports of Alexander Hamilton.* Univ. of California syllabus ser., no. 217. (Berkeley: Univ. of California Press. 1929. Pp. 170. $1.)

Reprints of reports on manufactures, establishment of a national bank, and establishment of a mint.

Gras, N. S. B. and Gras, E. C. *The economic and social history of an English village (Crawley, Hampshire), 909-1928.* Harvard econ. studies, 33. (Cambridge: Harvard Univ. Press. Pp. 800.)

Leonard, J. W., editor. *Who's who in finance, banking and insurance, in the United States and Canada: a biographical dictionary of contemporaries, 1927-1928.* (Brooklyn, N.Y., Philadelphia: Who's Who in Finance, Inc. 1929. Pp. x, 1321.)

Leubuscher, C. *Liberalismus und Protektionismus in der englischen Wirtschaftspolitik seit dem Kriege.* (Jena: Fischer. 1928. Pp. vi, 224. R.M. 7.)

In spite of the fact that the defeat of the liberal party in the general elections in1929 has deprived us from being able to watch how far a liberal government would live up to the expectations one was entitled to nourish after the publication of *Britain's Industrial Future,* the question of Liberalism versus Protectionalism has lost nothing of its actuality. *Whither Britain?*—and in a broader sense (Sombart Keynes) *Whither European Capitalism?*—is still unanswered.

Miss Leubuscher has attacked the problem in her book by taking up the different markets as fields of economic endeavor, in which the hostile ideas of liberalism and protectionism fight for the right to impose their economic philosophy on society. These markets, the market for labor, for capital, (the raising of funds for production and the investing of savings) and the field of foreign trade (empire policy) are analyzed carefully and the following conclusions reached:

The old liberal principles are endangered not only in some practical aspects but in their very fundamentals. There are three fields where the old individualistic British tradition is constantly undermined:

(1) The original individualistic structure of British industry and banking undergoes a process of being replaced by organized and centralized "big business." The old entrepreneurs give way to the anonymous stock company, and cartel agreements and trusts hamper further private initiative. The belief in free competition vanishes. After the example of American and German industries, now British industries also commence to regard a protected home territory as essential for a flourishing export trade. The growing concentration of industry and the new interest in organizations like the "Federation of British Industries" and the "British Commonwealth Union" makes it easier for the entrepreneurs to use the government for their purposes.

(2) The second danger for liberal traditions originates in the changing attitude of the population at large which more and more adopts the producer's instead of the consumer's point of view in looking at economic questions. Thus the strongest pillar of the old free trade tradition is in decay.

(3) The last, and according to Miss Leubuscher the severest, dread lies in the fact that both entrepreneurs and workers feel themselves to be entitled to a certain standard of living irrespective of the economic justification of their work and assume that it is the duty of the government to shelter their trade. This attitude, of course, makes the adjustment to the new economic situation of the post-war period ever so much more difficult.

For a general orientation on recent British economic policy Miss Leubuscher's book is very informative; it gives in 230 pages, what otherwise might have to be looked for in several thousand pages of government publications.

ROBERT M. WEIDENHAMMER

MORTARA, G. *Prospettive economiche, 1929.* (Milan: Università Bocconi. 1929. Pp. xiii, 498.)

This volume follows the pattern established by its predecessors. It treats of various economic conditions of Italy and of corresponding conditions in those other countries of the world in which they may be important. Since it is prepared for Italian readers, it treats Italian subjects with particular detail, at times enlarging upon political bearings. A reader of previous yearbooks of the series notes the repetition of many things said in them, a procedure which convenience and the changed map of the world may justify.

Of the topics treated, some, like the stability of monetary systems, lend themselves usefully to international survey and summary; others, like the extent of water power development, gain little from international comparison. There are illuminating discussions of general questions, as when gold and paper are considered as elements of different monetary systems. The volume as a whole is competently written and carefully edited. May an American reader call attention to the fact that the Standard Oil Company is referred to as a single enterprise and as if a famous dissolution had never occurred?

ROBERT F. FOERSTER

NATHAN, O., editor. *Die Wirtschaft des Auslandes, 1900-1927.* Einzelschriften zur Statistik des Deutschen Reich, Nr. 5. (Berlin: Reimar Hobbing. 1928. Pp. v, 91.)

NEFF, W. F. *Victorian working women: an historical and literary study of women in British industries and professions.* (New York: Columbia Univ. Press. 1929. Pp. 288. $3.50.)

OLSEN, M. *Farms and fanes of ancient Norway.* (Cambridge: Harvard Univ. Press. 1929. Pp. xvi, 349. $2.80.)

POLLOCK, F. *Die planwirtschaftlichen Versuche in der Sowjetunion, 1917-1927.* (Leipzig: C. L. Hirschfeld. 1929. Pp. xii, 411.)

PORTUS, G. V. *The American background, sketched for Australians.* (Melbourne: Macmillan. 1929. Pp. x, 126. $2.)

RAUCH, J. G. and ARMSTRONG, N. C. *A bibliography of the laws of Indiana, 1788-1927, beginning with the Northwest Territory.* Indiana hist. coll., vol. XVI. (Indianapolis: Indiana Library and Hist. Dept., Hist. Bureau. 1928. Pp. xxxix, 77.)

ROBERTS, S. H. *History of French colonial policy, 1870-1925.* Vols. I and II. Studies in econ. and pol. science no. 95. (London: P. S. King. 1929. Pp. xvi, 374; viii, 741. 42s. each.)

RUGG, H. O. *An introduction to American civilization: a study of economic life in the United States.* (Boston: Ginn. 1929. Pp. 623. $1.92.)

SANDRO, G. O. *The immigrants' trek: a detailed history of the Lake Hendricks colony in Brookings County, Dakota Territory, from 1873-1881.* (Sioux Falls, S.D.: Sessions Printing Co., 210 W. 9th St. 1929. Pp. 47.)

SANTALOV, A. A. and SEGAL, L., editors. *Soviet union year-book, 1929.* (London: Allen & Unwin. 1929. Pp. 624. 7s. 6d.)

SCHMIEDER, O. *The Brazilian culture hearth.* Univ. of Calif. pubs. in geography, vol. III, no. 3. (Berkeley: Univ. of Calif. Press. 1929. Pp. 159-198.)

The East Brazilian coast plain (between Cap S. Roque and Cap Frio) is the subject of Professor Schmieder's monograph, the content of which is no less attractive than the title. The author refers to his investigation as a study in historic-geography. With the addition of the word *economic* his purpose would have been more accurately described. Beginning with the early trials of the Portuguese and the French to gain a foothold in the sixteenth century, the narrative account traces the various cultural stages through which this region has passed, down to its "modern position of economic inferiority." Professor Schmieder conclusively proves his contention that "in no other part of Brazil do traces of the past in the cultural landscape of today call for a historic-geographical study as they do in the East Brazilian coast plain." The author's synthesis of political, geographic and economic forces is most impressive—in some respects unique.

As a field for research South America has been sorely neglected by economic historians—which is not easily to be accounted for, much less to be condoned. Professor Schmieder by inference hints at only a few of the many "problems" which deserve more detailed investigation.

Excellent photographs and six maps accompany the text. The documentation is exemplary.

FELIX FLÜGEL

SHERWELL, G. B. *Mexico's capacity to pay: a general analysis of the present international economic position of Mexico.* (Washington: Author. New York: Baker, Kellogg & Co., 120 Broadway. 1929. Pp. viii, 119.)

SMITH, A. D. H. *John Jacob Astor, landlord of New York.* (Philadelphia and London: Lippincott. 1929. Pp. 296. $3.50.)

TABOADELA, J. A. *Cuestiones economicas cubanas de actualidad.* (Havana: Imprenta de "El Figaro." 1929. Pp. 80.)

TANNENBAUM, F. *The Mexican agrarian revolution.* (New York: Macmillan. 1929. Pp. xvi, 192. $2.50.)

Events in Russia and Italy have so monopolized public attention that social experiments of large significance taking place elsewhere have passed almost unnoticed. This is notably true of the agrarian revolution now under way in our neighbor to the south. Yet the very proximity of Mexico means that radical changes there may bring with them more immediate international complications for the United States than will even more drastic changes in more distant countries. Tannenbaum's book should prove of interest, therefore, to a wide range of general readers, as well as to the narrower group of specialists concerned with the land and labor problems that are at the heart of the revolution. The Brookings Institution has performed a very real service in sponsoring and financing this study.

The chief merits of the book are to be found in the statistics which Mr. Tannenbaum has assembled on the distribution of land holdings before the revolution and the changes effected by the early years of the revolution. Much of the material is reproduced in an appendix, and all of the original records used in the organization of the land statistics are on file in the

library of the Institute of Economics at Washington and are there available to students. Tannenbaum's facts regarding the extent and distribution of foreign land holdings as well as his summary of revolutionary legislation directed at these holdings cast much light on American-Mexican relations.

The chief defect of the study is the lack of critical analysis of the accomplishments of the revolution. We are given a sympathetic account of the objectives of the revolution: restoration of their communal lands to the "free villages," breakdown of the feudal haciendas, encouragement of the small individual farmers or peasant proprietorship, restoration to the nation of its ancient rights to the sub-soil and power resources, rural education, protective labor legislation. The shifts in land holdings reveal in part the extent to which these aims have been translated into realities. But those who believe that such institutional changes as these can only come by slow growth and accretion will want to know more about the way in which the program is being worked out. They will want to know how much of the reform remains a purely paper reform incapable of application.

JOHN V. VAN SICKLE

TRENTIN, S. *Les transformations récentes du droit public italien de la charte de Charles-Albert à la création de l'état fasciste.* (Paris: Marcel Giard. 1929. Pp. xxiii, 696. 100 fr.)

USHER, A. P. *A history of mechanical inventions.* (New York: McGraw-Hill. 1929. Pp. xi, 401.)

VAN CLEEF, E. *Finland: the republic farthest north. The response of Finnish life to its geographic environment.* (Columbus: Ohio State Univ. Press. 1929. Pp. xv, 220. $2.50.)

This contribution in "anthropogeography," somewhat like some of Huntington's, is designed to trace the influence of natural environment upon racial character. There are interesting chapters on the land, climate, racial ancestry, agriculture, forests, industries, etc. Even the literature, music and art of the Finns are discussed; and a final chapter deals with the Finns in America, showing how, when they came here, they chose regions which presented a physical similarity to the home country, particularly the Lake Superior District, the Puget Sound Region, and New England, preferring such regions to others with far better soil and climate.

Of the total area of Finland, 60 to 75 per cent is stated to be "wet," 11.55 per cent consisting of lakes—of which there are some 40,000—30.8 per cent consisting of peat bogs, and the balance of poorly drained land other than peat bogs, while less than 12 per cent of the land is available for crop cultivation. The climate, although much less severe than the latitude of the country would suggest, is characterized by long winters, great variability, and by summers so cool as to threaten frost almost any time, and so humid and rainy as to make the harvesting of hay crops a very difficult task. This natural environment is the reason for the poverty of the people —the per capita wealth is stated to be only $216—but it is assumed also to be the basis of the extraordinary physical strength and endurance of the Finns, and of their perseverance, tenacity and courage. To the reviewer, there has always seemed to be something highly speculative about most conclusions regarding the relation of natural environment to civilization of racial character; but certainly there is much interesting material in this

little book regarding the extraordinary progress of the republic of Finland, and regarding the stalwart qualities of the Finnish people.

John Ise

Vandiveer, C. A. *The fur-trade and early western exploration.* (Cleveland: Arthur H. Clark Co. 1929. Pp. 316. $6.)

Von Eichborn, K. *Das Soll und Haben von Eichborn & Co. in 200 Jahren: Schicksal und Gestaltung eines Bankhauses im Wandel der Zeiten.* (Munich: Duncker & Humblot. 1928. Pp. xvi, 384. M. 20.)

Wade, H. T., editor. *The new international year book: a compendium of the world's progress for the year 1928.* (New York: Dodd, Mead & Co. 1929. Pp. 835.)

Webb, S. and Webb, B. P. *English poor law history.* Part 2. *The last hundred years.* Vols. I and II. (New York: Longmans Green. 1929. Pp. 1109. $14.)

Weberg, F. P. *The background of the panic of 1893.* A thesis. (Washington: Catholic Univ. of America. 1929. Pp. 71.)

Wickersham, J. *A bibliography of Alaskan literature, 1724-1924.* Vol. I. (Fairbanks, Alaska: Alaska Agric. College and School of Mines. 1927. Pp. xxvii, 635. $5.55.)

Many references to mining.

Annali di economia, 1929. Vol. V. (Milan: Università Bocconi. 1929. Pp. 525, 67. L.100.)

The Canada year book, 1929. (Ottawa: H. M. Stationery Office. 1929. Pp. xxxiii, 1070.)

The international financial position of the United States. (New York: National Industrial Conference Board. 1929. Pp. xx, 276. $5.)

Netherlands and the World War. Studies in the war history of a neutral, vol. IV. (New Haven: Yale Univ. Press. London: H. Milford. 1928. Pp. x, 226. 14s.)

New Zealand: local authorities handbook, 1929. No. 4. (Wellington: Census and Statistics Office. 1929. Pp. xi, 740. 7s. 6d.)

The South Manchuria Railway: report on progress in Manchuria, 1907-1928. (Dairen: South Manchuria Ry. New York: South Manchuria Ry. Co., 342 Madison Ave. 1929. Pp. vii, 238.)

Statistical yearbook of Quebec, 1928. (Quebec: H. M. Stationery Office. 1928. Pp. xxv, 459.)

Statistisches Jahrbuch deutscher Städte: amtliche Veröffentlichung des deutschen Städtetages. Jahrg. 24. (Leipzig: Friedrich Brandstetter.)

A survey of the New Orleans industrial zone, presenting a compilation of facts concerning the South's greatest city and the advantages it offers for manufacturing and distribution. Prepared by J. F. Coleman Engineering Co. (New Orleans: New Orleans Assoc. of Commerce, National Advertising Committee. 1929. Pp. 44.)

Year book of the state of Indiana for the year 1928. (Indianapolis: State House. 1929. Pp. vii, 1348.)

Agriculture, Mining, Forestry, and Fisheries

The Economics of Farm Relief: A Survey of the Agricultural Problem. By EDWIN R. A. SELIGMAN. (New York: Columbia University Press. 1929. Pp. xv, 303. $3.00.)

Professor Seligman's discussion of farm relief in this new book on *The Economics of Farm Relief* is a long awaited addition to the literature of agricultural economics. Brief, concise, methodically arranged almost to a fault, it deals directly with the economics of the subject and omits the mass of available data that too often has obscured the larger issues in other treatises on the subject. Proof of important conclusions is often lacking on this account. The possibilities for agriculture of improved internal waterways are summarily discussed for example, in a single paragraph, and the tariff as a measure of farm relief is analyzed within a page or two; but what the book may lose as a result of insufficient evidence is more than compensated for by clearness and directness. It is a valuable appraisal of the present agricultural situation in the light of modern economic theory.

The discussion shows a very good grasp of the subject considering the recent interest which the author has taken in it. He is probably at his best, however, in the earlier portions of the treatise, particularly when pointing out the economic characteristics of agriculture and the resulting agricultural problems. Here is found a fine statement of the cost and price aspects of the industry, although exception might be taken to the conclusion of this section that "above all, the farmer is not a business man and will with difficulty become one." It is true that farmers do not react to economic environment in the same manner as leaders of large-scale industry; but to characterize them as not being business men because they do not keep accounts or cannot prepare a budget, or even because they do not distinguish between personal outlay and crop expenditure, automatically excludes a host of shopkeepers, wholesale dealers, and small manufacturers who are generally included in this category.

The last and most interesting part deals with a program of farm relief. The relative brevity of this section and the disproportionate amount of space devoted to the discussion of a federal farm board permits the presentation of only a few of the principles that should serve as guides in developing a program of governmental aid, and will accordingly be disappointing to many readers because of the absence of suggestions of specific measures for improvement.

There will probably be little disagreement with the outline of the relief program suggested. It differs from the generally accepted program chiefly with respect to tariffs and transportation. It is suggested that,

considering its political aspects, tariff revision can be expected to offer little aid to agriculture, and more attention should be given to reorganizing railroad transportation and less to inland waterways. World peace, stabilized money, further development of agricultural credit, reorganization of taxation and a federal farm board are generally accepted as desirable conditions for promoting agricultural prosperity.

The farm board is looked upon as an agency to consider the demands of farmers, to secure needed readjustments in credit, taxation and the tariff, to establish model farms and farm communities, to classify land, and, most important of all, to exert some influence on the basic price factors. However, no suggestion is offered of how the board may affect prices, except that it is advised against hasty efforts to raise the level of farm prices by export plans or other methods, and the doubtful expedient of purchase and development of submarginal agricultural lands is suggested. No mention is made of the difficulties of ironing out the intra- and inter-seasonal price fluctuations, the principal function ascribed to the board, which seems to be a significant oversight particularly in view of the recognition in an earlier section of a general lack of understanding of factors affecting agricultural prices at the present time.

The attitude toward agriculture, it should be mentioned in closing, is sympathetic; but the expectations for relief from governmental assistance are not large. The present agricultural depression is looked upon as a passing phase in the evolution of agriculture which will ultimately be corrected by economic forces. Relief measures are more or less temporary expedients that deal with short-time problems or that operate until the industry reaches a more favorable price situation. Hence, the final conclusion: "The farmer's problem is in large part a problem of readjustment. The acuteness of the situation will disappear as has been the case in previous periods of depression. But the pains of the transition may be alleviated by remedial action. . . . . Government can indeed provide no panacea, nor can it reverse the operation of factors that depend upon forces beyond its control. But in the more modest task of removing obstacles, of affording opportunities, of equalizing conditions, of taking emergency action and of rendering aid where it is imperatively needed, a government farm board can do its share in helping to preserve the old-time American farmer and in leading him on to ever newer levels of prosperity and contentment."

H. Bruce Price

University of Kentucky

Agricultural Economics. By George O'Brien. (London: Longmans, Green and Company. 1929. Pp. viii, 195. $4.20.)

Introduction to Agricultural Economics. By Fred R. Yoder. (New York: Thomas Y. Crowell Company. 1929. Pp. xix, 472. $3.00.)

After a lapse of several years without any new book presenting itself as a general treatment of the field of agricultural economics, we find two volumes appearing almost simultaneously—one from a British and the other from an American author. Their similarities as well as their divergencies in approach, scope, and content challenge the reader's attention.

George O'Brien, professor of national economics of Ireland at University College, Dublin, gives us a highly generalized treatment of the agricultural wealth of nations in 195 pages, divided into three chapters —"The prices of agricultural products in general," "The prices of particular agricultural products," and "The state and agriculture." His approach is that of the prosperity of the country's agricultural industry as determined respectively by the level of farm product prices on the one hand and of operating costs on the other. His method of treatment is encyclopaedic rather than intimately and constructively critical. His wisdom appears to have come from an industrious culling of the large and growing literature of the subject rather than from close contact with research in the current business of farming such as is being done by the leaders of the agricultural economics group in the United States. To be sure, American writings bulk large among his citations; but some of the best works, such as Holmes' *Economics of Farm Organization and Management* and Black's *Production Economics,* are conspicuous by their absence. Perhaps the recent appearance of the former volume is sufficient explanation of its omission; but this excuse can hardly be made to include Black's work. It is noticeable also that Professor O'Brien seems to have relied almost exclusively upon books, whereas some of the best source material is to be found in journal articles or the voluminous literature put out in bulletin form by our state Experiment Stations and United States Department of Agriculture.

It is perhaps uncharitable to call attention to the fact that several of the citations are incorrect as to title or author, or to query the logical implications of a sentence such as the following: "Output cannot be stopped on a farm as it can in a factory; if the land is not cultivated by man, it will produce its own crop of weeds" (p. 11). A few pages later we are told that "every student of agricultural economics is agreed that the gains derived during the boom do not in fact compensate for the losses suffered during the slump and that the farmer has therefore a more pressing and urgent need for some policy of price stabilization than any other member of society" (p. 17). This being offered as a conclusion to the chapter on agriculture and the general price level, and

being a generalization with reference to the trade cycle as such rather than the recent war and post-war happenings, the outlook for agriculture would seem gloomy indeed in view of the absence of any clear indication that society will soon work out a technique of price stabilization.

Even aside from this passage, the book contains other notes of pessimism such as: "Enterprising sons of farmers drift toward the towns while those who remain on the land become conservative and timid" (p. 50)—a dictum which probably would not be universally accepted in the United States, however true it may be in Irish experience or elsewhere in Great Britain or Europe. Professor O'Brien does not indicate what he considers to be its field of applicability. Discouraging, likewise, is his whole view of the land basis of agriculture. We may cite merely his conclusion that "practical discussion must center on adopting the best type of farming for farms of a definite size rather than inquiring what size of farm is most desirable" (p. 54). To follow out the logic of Professor O'Brien's system of agricultural economics, this sentence should be linked with another: "Assuming that small farms are more suited than large for mixed dairy farming, the government of any country that is composed predominantly of small farmers should aim at encouraging mixed dairy farming rather than for the cultivation of cereal crops" (p. 130). The effect of such a production policy upon prices seems to be left out of consideration, although it had been set down that "demand is if anything more important than supply in conferring value on goods and thereby fixing their price" (p. 19).

In view of the declaration of national policy both explicit and implicit in the establishing of the recent Federal Farm Board in the United States, particular interest centers in the book's discussion of "The state and agriculture." "The state can increase the prosperity of agriculture in two directions: by measures designed to increase the efficiency of the industry itself or by measures designed to raise the price of farm products" (p. 114). The author goes on to say much in praise of a state policy of increasing the efficiency of agriculture in either its production or marketing branches through educational measures. On the special protection of agricultural interests through tariff, credit agencies, land policy, or the like, his conclusions are much less positive; and he does not come to grips with proposals for the direct influence of prices such as have been agitated in this country and to a degree espoused in several parts of the British Dominions. Nor, save in its educational function, does he touch the kind of indirect ameliorative agency which we have begun to experiment with under the name of the "Federal Farm Board."

Professor Yoder "believes that more will be gained by beginning students in agricultural economics in having them master a few fundamental principles of economics and get a clear picture of the economics organization of our agriculture than in spending a great deal of time in threshing over theoretical controversial points" (p. x). To this belief his book is faithful in its avoidance of controversial points of theory; that it establishes in the student's mind the "fundamental principles of economics" which are important, if the study of agricultural economics is to be more than amiably descriptive, is not so certain. Likewise, in spite of the 463 pages which the book embraces and its wide excursions into even the more remotely connected parts of the field, the reviewer is somewhat dubious whether the student would end with a "clear picture of the economic organization of our agriculture" as it is today.

The looseness of the concepts employed is strikingly illustrated in Professor Yoder's listing of the factors in agricultural production, as "land, land tenure customs, farm machinery, livestock, buildings, farm insurance, farm credit, farm labor, farm management, the farm marketing system, transportation facilities, taxation and tariffs, price cycles, organized farmer movements, agricultural education, accumulated agricultural knowledge and skill, state promotion of agriculture, accumulated farm wealth and income, and farmers' standards of living" (p. 69). About each of these concepts something is said in the course of the book; but it fails to knit itself into any stout fabric of logically consistent and factually adequate analysis of current agricultural problems. To cite a single example, four chapters are devoted to the subject of land; but, where it might reasonably be expected that all this would bring us out to a clear understanding of the post-war land boom and the present outlook for farm land prices in the light of general national development, a rapidly changing technique of agriculture, geographic shifts both in agricultural production and in consumer population, we have only vague generalizations about "the rise and fall of prices during periods of financial disturbances" and a discussion of land policy which follows lines of approach conventionalized by long usage rather than making a fresh and vigorous analysis of land policy for the individual and the nation under present and prospective conditions. This is not true, however, of the section on "social aspects of ownership and tenancy."

Professor Yoder, like Professor O'Brien, has made an industrious sifting of the literature of agricultural economics. No great originality or penetration into the essential problems which have emerged out of the rapidly changing conditions of the industry is apparent.

E. G. Nourse

Institute of Economics

Agricultural Reform in the United States. By John D. Black. (New York: McGraw-Hill. 1929. Pp. x, 511. $4.00.)

This book is virtually, though not literally, the first of its kind, dealing with a subject which has attracted the attention of the public, the press and Congress in a most unusual degree.

In Chapter I, Professor Black gives an analytical view of agriculture up to date. With this view there is little to criticise. It is shown that the present agricultural depression, while immediately caused in its most acute aspects by the war and its attendant inflation and deflation, the roots of the trouble penetrate much deeper, and were well established before the war began. One explanation given as the cause of the low prices of farm land is "the new scale of living of farm people." The statement is sufficiently broad and vague as to allow strong defense. However, if the author means to convey the idea that the scale of living has been raised during the present decade, all that can be said to the contrary is that nobody knows at all definitely what has happened to the farmers' scale of living since 1920. In some ways it has improved; in some ways suffered a decline.

In the closing pages of the first chapter is to be found the most pretentious attempt to forecast the agriculture of the next quarter century thus far made, within the writer's knowledge. Moreover, it is a commendable attempt. There has been much discussion as to whether or not economics is a sufficiently exact science to furnish the basis of accurate forecasts. But forecasting is the order of the day among a respectable group of present day economists; and here, with little in the nature of statistical evidence, appears a list of twenty-one predictions. The majority of these forecasts will be accepted as altogether probable. Professor Black apparently has little faith in the ultimate results of coöperative marketing, and predicts that "spreads between farm and retail prices will probably increase," and adds, "but the consumer will probably pay for most of this." How this is to be accomplished is not explained, but in any case how can the consumer escape paying all of it?

Probably no one will have the courage to dispute the statement that taxes on farm property will continue to rise, even though the value of the property may fall. This is a significant comment on the prospects of a reform in taxation which should put the tax burden on those able to pay. The guess as to tenancy is to the effect that it will probably increase, with a good prospect that it will not.

It is gratifying to find the statement in Chapter II that the government has done more for city people than for agricultural people. A plausible, though untrue, argument to the contrary is easy to make, and is widely believed.

After commenting on a series of arguments to the effect that a nation should be strongly rural because of the social and political advantages of such a make-up, Professor Black goes on to say, "There is enough validity to the foregoing arguments to make a nation want to keep itself predominantly rural if it can be accomplished without much sacrifice. . . . . We can go so far as to say that some measure of pecuniary advantage should be sacrificed in favor of keeping a country rural to a considerable degree" (p. 58). A "considerable degree" is, of course, a safe prescription, but that a nation should want to keep itself "predominantly rural" is quite another matter. In the next few pages arguments are used which seem in part to support, and in part to contradict, the proposition that it is so advantageous to a nation to remain predominantly rural as to justify enhanced payments to people designed to keep them in the country for the sake of a larger country population. The notable article by Professor Visher in *Who's Who in America*, Volume XIII, gives one a new notion as to the superiority of the country over the city as a place for developing character and leadership.

The account of "Relief programs" is accurate and useful, consisting mainly of a chronological list of efforts on the part of Congress to pass relief measures.

As a scientific presentation, Part II, on "Surpluses," represents the high-water mark of the book. The discussion is divided into weather, overplanting, and season surpluses, and shows the relation of these surpluses to prices. Much supporting, convincing evidence is given in the form of tables and charts.

The chapter on the tariff—nearly fifty pages—is convincing, but will be discouraging to those who hope to cure farm ills by this means. The discussion of the McNary-Haugen bill is a real achievement, in view of the endless confusion and muddled thinking on the subject, where heat and not light has characterized the bulk of the arguments. Both sides are presented not only clearly, but in a judicial manner. The other well-known price-raising plans are adequately handled, and in addition a new version of the domestic allotment plan is presented. This plan being rather elaborate and involved, no attempt at review or appraisal of it will be undertaken.

Professor Black believes price raising feasible. He also states baldly that none of the plans considered is price-fixing. This is probably to be decided for each interested party on the ground of his own interpretation of the term; and no good is likely to come of an argument concerning it. However, there is room for a great deal of difference of opinion regarding the statement that these price-raising plans are all plans for raising the price of the product in the domestic market

above the world level, "exactly in the manner of tariff duties." It seems that while they are exactly the same as to purpose, the manner of operation, though to an extent similar, is by no means the same. The McNary-Haugen bill proposed to "fix" the price at all points a certain distance above the curve which would otherwise occur. The consumer would at all times pay this full difference. A tariff raises the price to any extent varying from zero to a full hundred per cent of its amount; and the consumer virtually never knows how much it is costing, or if it costs anything. Surely these two price influences are not exactly alike.

Part IV contains, along with others, a discussion of coöperation, in which the author has little faith so far as immediate results are concerned, and a chapter on "Stabilization corporations," which are recommended.

Part V consists of a series of essays on subjects designated as "The reforms." Prominent among the titles are "Production"; "Land utilization"; "Marketing"; "Transportation"; "Immigration and farm labor."

While no two students of the great subject of agricultural reform could agree wholly on details and specific proposals, there will be hearty agreement respecting the main theses and general merits of this book. The plan is comprehensive; and the treatment is stimulating.

BENJAMIN H. HIBBARD

University of Wisconsin

NEW BOOKS

ALLEN, N. B. *Cotton and other useful fibres.* (Boston: Ginn. 1929. Pp. 376. 80c.)

BRITTON, H. *Bibliography of petroleum and allied substances, 1922 and 1923.* U. S. Dept. of Commerce bull. 290. (Washington: Supt. Docs. 1929. Pp. 667. $1.)

CARR, L. F. *America challenged: a preface to a point of view.* (New York: Macmillan. 1929. Pp. 322. $3.50.)

This book is a popular presentation of the so-called agricultural problem by one who has been a farmer and an agricultural editor. It therefore contains much illustrative material of farming situations in all parts of the country as well as an interesting combination of historical perspective and current economic facts relating particularly to the agricultural industry.

The history of the United States is interpreted as essentially a conflict of agricultural and urban interests. Although the frontier with its peculiar economic and political demands has disappeared, the conflict as manifested by the recent McNary-Haugen controversy still exists. The recognizing and meeting of the issues of this conflict of interests is, in the opinion of the author, the problem, the challenge, in the meeting of which will come the real test of America.

Although painting a rather drab picture of the present agricultural situation, the author expresses an optimistic belief that rural opportunities

may be substantially improved, provided that agriculture as well as public and private agencies meet the challenge. Self-aid is mentioned as the prerequisite of agricultural progress—larger farms, new methods, more machinery are given due consideration—but, it is pointed out, self-help is not sufficient. Public aid in the form of more equable taxation and a tariff that gives equal protection to industry and agriculture, chiefly by reducing duties on industrial products, is necessary to place agriculture in a position where it has opportunities more nearly equal to other industries.

A significant feature of the book, that is too frequently overlooked in discussions of farm relief, is a recognition of the fact that the ills of different types of farming require different remedies. Dairy farming, it is pointed out, can be helped most by coöperation, specialty farming by coöperation and governmental assistance, and staple farming chiefly by governmental aid. In the case of the great staples, as wheat and cotton, disposal of surpluses by governmental aid is considered as being in keeping with the policy of American industry and the only certain road to relief. In this connection the novel suggestion of assistance by private capital and enterprise to maintain an American level of prices is made. We are not told, however, how such an enterprise would function, how it would be organized, how business men could be induced to finance it, or how it would be controlled to safeguard the interests of agriculture. Moreover it is difficult to understand how the enterprise could operate successfully except as it had complete control of the marketing of a given product; and it is doubtful whether the American people would be willing to grant such control of foodstuffs to private monopolies.

H. Bruce Price

University of Kentucky

Christensen, C. L. *Farmers' coöperative associations in the United States, 1929*. U. S. Dept. of Agric., circ. no. 94. (Washington: Supt. Docs., 1929. Pp. 66. 15c.)

——————. *Pooling as practiced by coöperative marketing associations.* U. S. Dept. of Agric., misc. pub. no. 14. (Washington: Supt. Docs. 1929. Pp. 12. 5c.)

Chu, T. S. and Chin, T. *Marketing of cotton in Hopei Province.* Bull. III. (Peking: Institute of Social Research, 6 Tung Ho Yen, Nan Chang Chieh. 1929. Pp. 54. 60c.)

Colvin, E. M., compiler. *Agricultural relief: a selected and annotated bibliography.* Agric. econ. bibliography no. 27. (Washington: Supt. Docs. 1929. Pp. 52, mimeographed.)

——————. *The strawberry industry in the United States: a selected list of references on the economic aspects of the industry.* Agric. econ. bibliography no. 28. (Washington: Supt. Docs. 1929. Pp. 52, mimeographed.)

Cornish, N. H. *Coöperative marketing of agricultural products.* (New York: Appleton. 1929. Pp. 501. $3.50.)

Davis, J. S., and others. *The export debenture plan for wheat.* Wheat studies, vol. V, no. 8. (Stanford Univ., Calif.: Food Research Inst. 1929. Pp. 45. $1.)

Denune, P. P. *The social and economic relations of the farmers with the towns in Pickaway County, Ohio.* Bureau of Business Research mono-

graphs no. 9. (Columbus: Ohio State University in coöperation with U. S. Dept. of Agric. Pp. vii, 72.)

Dietz, C. S. *The developed and undeveloped mineral resources of Wyoming.* Bull. 21. (Cheyenne: Wyoming Geological Survey. 1929. Pp. 205.)

Duvel, J. W. T. and Hoffman, G. W. *Major transactions in the 1926 December wheat future.* U. S. Dept. of Agric., tech. bull. 79. (Washington: Supt. Docs. 1928. Pp. 52. 10c.)

Ellinger, T. U. H. and Clemen, R. A. *Marketing livestock and meats.* Rev. and new matter. (Chicago: Armour's Livestock Bureau. 1929. Pp. 112.)

Hayden, J. J. *Federal regulation of the production of oil.* A thesis. (Washington: Catholic Univ. of America. 1929. Pp. x, 132.)

Hayes, A. W. *Rural sociology.* (New York: Longmans Green. 1929. Pp. viii, 598.)

Hutchins, W. A. *Financial settlements of defaulting irrigation enterprises.* U. S. Dept. Agric., circ. no. 72. (Washington: Supt. Docs. 1929. Pp. 46. 10c.)

————. *Mutual irrigation companies.* U. S. Dept. Agric., circ. no. 82. (Washington: Supt. Docs. 1929. Pp. 51. 10c.)

Kelsey, R. W. *Farm relief and its antecedents.* (Haverford, Pa.: Pennsylvania History Press. 1929. Pp. 36.)

Killough, H. B. and Killough, L. W. *Raw materials of industrialism.* (New York: Crowell. 1929. Pp. xix, 407. $3.75.)

Lippincott, I. *Economic resources and industries of the world.* (New York: Appleton. 1929. Pp. xxii, 656. $5.)

Master, O. and Elias, A. E. *Dominion of Canada animated atlas.* (Ottawa: Natural Resources Intelligence Service, Dept. of the Interior.)

Pehrson, E. W. *Summarized data of zinc production, showing the relation of production in the United States to that of the world.* U. S. Dept. of Commerce, econ. paper 2. (Washington: Supt. Docs. 1929. Pp. iv, 47. 15c.)

Roberts, J. *Food animals and meat consumption in the United States.* U. S. Dept. of Agric., dept. circ. 241. (Washington: Supt. Docs. 1929. Pp. 24. 5c.)

Santmyers, R. M. *Strontium from a domestic standpoint.* U. S. Dept. of Commerce, econ. paper 4. (Washington: Supt. Docs. 1929. Pp. 19. 5c.)

Shanahan, E. W. *Refrigeration as applied to the transportation and storage of food products.* (London: Gee & Co. 1929. Pp. x, 96. 5s. 6d.)

A useful monographic study covering both the economic aspect and technical side of refrigeration. A brief bibliography prefaces the book.

Taylor, A. E. *Wheat under the Agricultural Marketing act: some problems of the Federal Farm Board.* Wheat studies, vol. V, no. 9. (Stanford Univ., Calif.: Food Research Inst. 1929. Pp. 78. $1.50.)

Thomas, R. H. *The merchandizing of petroleum products.* (Ontario, Calif.: Author. 1929. Pp. 231. $2.50.)

Thuss, A. J., Jr., and others. *Texas oil and gas: a treatise on the law pertaining to rights in oil and natural gas in the state of Texas, including leases and conveyances.* (Kansas City, Mo.: Vernon Law Book Co. 1929. Pp. 638.)

True, A. C. *A history of agricultural education in the United States, 1785-*

1925. U. S. Dept. Agric., misc. pub. no. 36. (Washington: Supt. Docs. 1929. Pp. 445. $1.)

Vance, R. B. *Human factors in cotton culture: a study in the social geography of the American South.* (Chapel Hill: Univ. of North Carolina Press. 1929. Pp. xi, 346. $3.)

Verret, J. A. and Doty, R. E. *An acreage census of cane varieties for the crops of 1928, 1929, 1930, and the official yield statistics for the 1928 crop.* Circ. no. 53. (Honolulu: Experiment Station of the Hawaiian Sugar Planters' Assoc. 1929.)

Voskuil, W. H. *The economics of water power development.* (New York: McGraw-Hill. 1929. Pp. xii, 225. $3.)

Wiecking, E. H. *The farm real estate situation, 1927-28.* U. S. Dept. of Agric. circ. no. 60. (Washington: Supt. Docs. 1928. Pp. 63.)

Window, J. J., and others, compilers. *Dairy statistics, year ended December 31, 1926, with comparable data for earlier years.* U. S. Dept. Agric., statistical bull. 25. (Washington: Supt. Docs. 1929. Pp. 256. 35c.)

Withycombe, P. *Greater national prosperity through agriculture.* (Carlton, Ore.: Sentinel Press. 1929. Pp. 47.)

Agriculture in United States, special report supplementing exhibit of United States Department of Agriculture at Ibero-American Exposition, Seville, Spain, 1929. (Washington: Supt. Docs. 1929. Pp. 95. 50c.)

Beef production on the farm. Farmers' bull. 1592. (Washington: Supt. Docs. 1929. Pp. 14. 5c.)

Cotton production in United States, crop of 1928. (Washington: Supt. Docs. 1929. Pp. 40. 10c.)

Economic problems of reclamation. (Washington: Supt. Docs. 1929. Pp. 35.)

Fishery industries of United States, 1927. U. S. Bureau of Fisheries Doc. 1050. (Washington: Supt. Docs. 1929. Pp. 401-547. 25c.)

Live stock and animal products statistics, 1928. (Ottawa: H. M. Stationery Office. 1929. Pp. 107. 25c.)

Methods, costs, and safety in stripping and mining coal, copper ore, iron ore, bauxite, and pebble phosphate. U. S. Dept. of Commerce, bull. 298. (Washington: Supt. Docs. 1929. Pp. x, 275. 70c.)

Mineral resources of Alaska, report on progress of investigations in 1926. U. S. Geological Survey bull. 797. (Washington: Supt. Docs. 1929. Pp. 227. 80c.)

Statistische Zusammenstellungen über Aluminum, Blei, Kupfer, Nickel, Quecksilber, Silber, Zink und Zinn. Jahrg. 29. 1913, 1920-1927. (Frankfurt am Main: Metallgesellschaft. 1928. Pp. xxv, 99.)

Manufacturing Industries

NEW BOOKS

Broderick, J. T. *Forty years with General Electric.* (Albany: Fort Orange Press. 1929. Pp. 218. $2.50.)

Grossmann, C. J. R. *The possibilities of cotton manufacturing in Texas.* Bull. no. 2852. (Austin: Univ. of Texas. 1928. Pp. 69.)

Haber, W. *The building industry.* (Cambridge: Harvard Univ. Press. Pp. about 600.)

Streit, J. ***The paper-box industry in Cincinnati.*** **Vocational pamphlet no. 8. (Cincinnati: Vocation Bureau, Cincinnati Public Schools. 1929. Pp. 43.)**

Taylor, G. W. ***Significant post-war changes in the full-fashioned hosiery industry.*** **(Philadelphia: Univ. of Pennsylvania Press. 1929. Pp. xi, 130. $2.)**

An intensive study of the recent changes which have taken place in an important manufacturing industry. Of special interest to the student of economic trends are the problems of changes in style, seasonal factors and the difficulty of adjusting capital to the needs of production.

Annual statistical report for 1928. (New York: American Iron & Steel Institute. 1929. Pp. vi, 119.)

Census of manufactures, 1927, statistics for cities. (Washington: Supt. Docs. 1929. Pp. 86.)

The flour-milling industry in Nebraska. Nebraska studies in business, no. 23. (Lincoln: Univ. of Nebraska. 1929. Pp. 58. 50c.)

Rayon: a new influence in the textile industries. (New York: Metropolitan Life Insurance Co., Policyholders Service Bureau. Pp. 31.)

Transportation and Communication

The American Merchant Marine Problem. (New York: National Industrial Conference Board. 1929. Pp. xiv, 167. $2.50.)

In making this study of the American merchant marine problem, the National Industrial Conference Board, which has issued a number of studies of international problems, does not attempt to suggest new or support old proposals for the solution of the merchant marine problem, but brings together and clarifies the facts and controversial issues and thereby hopes to promote a clearer public understanding of the situation. The present situation, the favorable and unfavorable factors affecting the maintenance of an American merchant marine, and suggested means for improving the American merchant marine and its services, form the order of presentation.

At the present time (1928 data) about one-third of the value of the water-borne foreign commerce of the United States is carried in American vessels. This commerce is carried on in 659 vessels, 61 per cent of which are privately owned and 39 per cent owned and operated, directly or indirectly, by the United States Shipping Board. In coastwise service the privately owned vessels number 714 while the Shipping Board owns but one vessel engaged in this type of service. For the last year that statistics are availiable the Shipping Board owned 447 vessels which were laid up and private interests owned 162 vessels which were out of service.

Inasmuch as over one-half of the cargo tonnage of our foreign commerce is carried in foreign-owned vessels, it is generally agreed that the competitive status of American vessels in world trade is unfavorable

and that, in the absence of governmental protection and aid, relatively few private American shipowners would survive. It is also generally admitted that it is desirable for the United States to maintain a certain amount of ocean-going shipping facilities for the support of foreign trade and that the shipbuilding and shipping industry should be supported as important elements in our system of national defense. As to how far governmental assistance should go in supporting a merchant marine is an issue in regard to which divergent opinions exist.

This study contains a complete analysis of the various means and methods which have been followed, particularly since the war, in giving aid and protection to our ships engaged in foreign commerce. The controversy with respect to this matter revolves about the fact that there are two conceptions in regard to the purpose of governmental assistance. One theory is based on the assumption that government aid should be granted as a measure of tariff protection to maintain the shipping industry as a part of the industrial activity of the nation. The other theory maintains that the government should support as a public utility the shipping needed for foreign trade and national defense and that the amount expended for this purpose should not exceed that required to achieve the desired result.

The authors of the report come to the conclusion that a solution of the American merchant marine problem requires the early withdrawal of the United States Shipping Board from the field of operation on the ground that government ownership is a wasteful and uneconomic method of providing the shipping facilities required by national interests in foreign trade and national defense. The Merchant Marine act of 1928 is regarded as a step in advance in solving this problem. In discussing the subject of preferential treatment to American vessels by our government it is pointed out that any advantages accruing from such a policy may be offset by foreign countries subjecting American shipowners to unfair foreign discrimination.

While the report contains a great many tables and charts with commercial and shipping data, no figures are presented which deal with the financial aspect of our government's experiment in the operation of ocean-going vessels since the war.

Henry R. Trumbower

University of Wisconsin

NEW BOOKS

Bennett, R. R. *Aviation: its commercial and financial aspects.* (New York: Ronald. 1929. Pp. 138. $3.)

Brown, C. K. *A state movement in railroad development: the story of North*

Carolina's first efforts to establish an east and west trunk line railroad. (Chapel Hill: Univ. of North Carolina Press. 1929. Pp. 293. $5.)

Brunner, C. T. *The problem of motor transport.* (London: Benn. 1928. Pp. 187. 12s. 6d.)

Eno, W. P. *Simplification of highway traffic.* (Saugatuck, Conn.: Eno Foundation for Highway Traffic Regulation, Inc. 1929. Pp. 217. $5.)

George, J. J. *Motor carrier regulation in the United States.* (Spartanburg, S.C.: Band & White. 1929. Pp. xix, 266.)

Hicks, F. C., editor. *High finance in the sixties: chapters from the early history of the Erie Railway.* (New Haven: Yale Univ. Press. 1929. Pp. 348. $5.)

McLean, S. J. *Inland traffic.* (New York: Alexander Hamilton Inst. 1929. Pp. xvii, 355.)

Moon, P. T., editor. *Railroad consolidation: a series of addresses and papers.* Proceedings, vol. XIII, no. 3. (New York: Academy of Pol. Science. 1929. Pp. xii, 125. $1.)

Morgan, C. S. *Who bears the freight rate?* Reprinted from a proposed report by examiners of the Interstate Commerce Commission. (New York: Committee on Public Relations of the Eastern Railroads, 143 Liberty St. 1929. Pp. 12.)

Mundy, F. W., editor. *Mundy's earning power of railroads.* 24th ed. (New York: Jas. H. Oliphant & Co. 1929. Pp. 625.)

Sumner, J. D. *New York Barge Canal traffic, 1918-1928.* Studies in business, no. 2. (Buffalo: Univ. of Buffalo, Bureau of Business and Social Research. 1929. Pp. 55. $1.)

Wilmerding, C. H. *Chicago traction plan: containing suggestions, made from the standpoints of the public, of present security holders and of future investors, for a general settlement of the traction problem.* (Chicago: Author. 1929. Pp. 46.)

Capital expenditures and purchases in the railway industry. Misc. ser. no. 48. (Washington: Bureau of Railway Economics. 1929. Pp. 24.)

Consolidation of railroads. 4th suppl. *1927—August, 1929, inclusive.* (Washington: Bureau of Railway Economics. 1929. Pp. 31, mimeographed.)

Freight commodity statistics. Class I steam railways in the United States, year ended December 31, 1928. Statement no. 29100. (Washington: Supt. Docs. 1929. Pp. 137. 80c.)

Port and terminal charges at United States ports. War Dept. and U. S. Shipping Board, misc. series no. 1. (Washington: Supt. Docs. 1929. Pp. x, 557.)

Ports of Galveston, Houston, Texas City, and Corpus Christi, Texas: Part 2, Port of Houston, Texas. Rev. 1928. Port series no. 6. (Washington: Supt. Docs. 1929. Pp. 97. 35c.)

Rail and air service: coördination—competition. A list of references. (Washington: Bureau of Railway Economics. 1929. Pp. 24, mimeographed.)

Shipping act, merchant marine act, 1920, as amended, and merchant marine act 1928, suits in admiralty act, emergency shipping legislation, and other laws, proclamations, and executive orders relating to Shipping Board and Merchant Fleet Corporation. Rev. to March 4, 1929. (Washington: Supt. Docs. 1929. Pp. 193. 30c.)

Trade, Commerce, and Commercial Crises

NEW BOOKS

Dowling, S. W. *The exchanges of London.* (London: Butterworth & Co. 1929. Pp. vii, 260. 7s. 6d.)

Designed to present "a broadly painted picture of London's commerce as a whole, so far as the Exchanges are concerned. . . . . A chapter is given to each Exchange, and after an outline of its history and development an attempt is made to explain the methods of business, and in some cases the contracts used, as well as to describe the Exchange itself—the description being in every case the result of personal visits. Chapters are included on the Royal Exchange—the old home of most of the Exchanges—and on the docks and Port of London, with which the Exchanges are necessarily connected, and another chapter on foreign exchange and foreign trade is added, explaining the methods by which the imports and exports dealt in on the various Exchanges are financed." Among the Exchanges described are: the Royal Exchange; Lloyd's; the Stock Exchange; the Metal Exchange; the Rubber Exchange; the Coal Exchange; the London Iron and Steel Exchange; the Baltic; the Corn Exchange; and the Wool Exchange.

Henry, A. K. *The Panama Canal and the intercoastal trade.* A thesis. (Philadelphia: Univ. of Pennsylvania. 1929. Pp. 108.)

Kirkaldy, A. W. *The romance of trade: a survey commercial and economic.* New ed. rev. (New York: Dutton. 1929. Pp. ix, 246. $2.10.)

This is a brief survey of commercial and economic development presented in popular language. The discussion covers early or primitive economic problems, the development of a money economy, doctrines concerning the right to take interest, the establishment of trade routes, the growth of banking, the beginnings of modern economic theories, and the present-day relationships between employers and employees. In his treatment of these various topics the author has made the study of the elemental facts and principles of economic development simple and attractive to the lay reader. More books of this character would serve to widen public interest in economic problems and the industrial side of our social development.

Professor Kirkaldy, however, has not written a romance. In the judgment of the reviewer this term would be more appropriate if more attention had been given to the organization of early self-sufficient agricultural communities in Europe, the transformation wrought by the growth of town economy and the later development of a nationalistic spirit which has been such a potent force in recent international politics. A fuller treatment of the national trade rivalries which followed the geographical discoveries of the fifteenth and sixteenth centuries would also have added something of the striking and picturesque in the treatment of early modern commerce.

While most of the facts bearing upon industrial progress are in accordance with the general beliefs of economic historians, one may question the author's statements with regard to the influence of certain political and military events. For example, the writer's version (page 32) concerning the economic effect of the development of Turkish power over eastern Europe in the fifteenth century is hardly in accord with the results of recent historical investigations. The old view which associated the discoveries of Columbus, Vasco da Gama, the Cabots and other navigators with the establishment of the empire of the Ottoman Turks because of the heavy tribute

imposed by that power upon the overland commerce between the East and the West is being abandoned. One may also take exception to the author's seemingly hostile attitude toward governmental interference in business. While it is true that such governmental interference is often incited by purely partisan interests, one lesson which the recent past has taught us is that unregulated competition does not preserve the "right balance" between various interests or "sections," whether of labor or capital. Modern business developments have necessitated an increasing measure of political control over industry, the Harding slogan of "less government in business" notwithstanding. These rather exceptional aspects, however, should not blind us to the very real merits of a volume which has made the elemental truths of an abstruse subject interesting and attractive.

ABRAHAM BERGLUND

KLEIN, J. *Frontiers of trade.* (New York and London: Century. 1929. Pp. xv, 328. $2.50.)

ROTH, H. *Die Übererzeugung in der Welthandelsware Kaffee im Zeitraum von 1790-1929.* (Jena: Fischer. 1929. Pp. viii, 146. M. 6.)

SMITH, H. L. *The board of trade.* (London: Putnam. 1928. Pp. 288. 7s. 6d.)

Foreign commerce and navigation of United States, calendar year 1927. Vol. II. (Washington: Supt. Docs. 1929. Pp. 212. $1.25.)

Foreign trade in 1929: official report of the sixteenth national foreign trade convention held at Baltimore, Maryland, April 17-29, 1929. (New York: National Foreign Trade Convention. 1929. Pp. 318. $2.50.)

Memorandum on production and trade, 1913 and 1923-1927. (Geneva: League of Nations, Econ. and Finan. Section. 1929. Pp. 79. 2s.)

Resolutions: International Chamber of Commerce, fifth general congress, Amsterdam, July 8-13, 1929. (Washington: Internat. Chamber of Commerce, American Section. 1929. Pp. 76.)

Trade and shipping in the Dominion of New Zealand, 1928: statistical report. Parts 1 and 2. (Wellington: Census and Statistics Office. 1929. Pp. vii, 325; xix, 101. 20s.; 2s. 6d.)

Accounting, Business Methods, Investments and the Exchanges

Corporate Earning Power. By WILLIAM L. CRUM. (Stanford University, Calif.: Stanford University Press. 1929. Pp. xxiv, 342. $5.00.)

Out of the wealth of information revealed by this careful and illuminating study, Professor Crum selects three conclusions which he believes will be of immediate practical use. First, "the rate of return on gross corporate business in all lines remained remarkably stable during the years 1922-1927," contrasting sharply with the years 1916-1921 during which there were wide fluctuations. Second, some lines deviated greatly from the average experience, for example, agriculture, mining, textiles, and rubber; even 1926 which is generally regarded as a highly prosperous year revealed wide diversity among various businesses in

the rate of return on invested capital. Third, on the average, "earnings on corporate capital have been surprisingly low."

At first glance, it may seem that conclusions one and two are contradictory. But, in the first case the author deals with the average total for all corporations, while in the second case he comments on individual earnings which go to make up the total. The total earnings for a group of corporations may remain stable from year to year, however much earnings of the individual companies may vary.

The source of information for the present volume is the bulletin *Statistics of Income* issued annually by the United States Commissioner of Internal Revenue. The years covered are from 1916 to 1926, with estimates for 1927 based on preliminary figures. That these reports are in some aspects incomplete and inadequate is a constant handicap to the author's efforts. This is quite evident in his search for a standard by which to measure the comparative profitableness of corporations. When he wishes to estimate the return on invested capital, he finds that only for three years, 1919, 1920, and 1921, are figures for invested capital available (ch. IX). Aside from the doubtful value of estimates of invested capital, whatever that may mean, he found that it was calculated only for those corporations which reported a net income.

A similar difficulty was encountered in the attempt to estimate the rate of return on total assets, which the author calls the *earnings ratio* (p. 130). For only 1926 were statistics of assets in fairly satisfactory shape. There were deficiencies even here. There were figures on total assets in the bulletins for 1924 and 1925, but they were presented in a different form from 1926, so that accurate comparisons were impossible (p. 187). So the earnings ratio cannot be ascertained for the eleven-year period. However, in each case the author carries these calculations through for the available period. The determination of other ratios presented similar problems.

To establish a basis of comparison for the eleven-year period recourse is had to what Professor Crum calls the *profit ratio*, the percentage ratio of *net income* minus *income tax* to *gross income* (p. 5). Income from tax exempt securities is not included in these figures. The author explains that the profit ratio is not so satisfactory as a percentage return on capital, if agreement could be reached on the proper definition of capital. But statistics of capital are not available. In addition, the profit ratio is not a sure method of measuring the comparative rate of return in two lines of industry. All that is claimed for it is that it is "provisionally satisfactory" (p. 5). The imperfection of this method is made clear by examining the charts on pages 140 and 141, which show considerable variance between the *earnings ratio* and

the *profit ratio for* 1926. For the eight major industrial divisions combined, the profit ratio is about double the earnings ratio. When the manufacturing division is broken up into twelve groups, comparing profits by using one ratio would in some cases bring quite different results from those reached by using the other. Those who may be prone to criticise this method should remember that the *profit ratio* is adopted only because it is the most satisfactory one available for the years covered by this investigation.

Using the profit ratio, and other ratios when available, Professor Crum has analyzed the material at hand with his usual great skill. He tabulates and charts the profit ratio for all corporations from 1916 to 1926, adding 1927 wherever possible. Then he gives the ratio for each of the eight major industrial divisions, manufacturing, trade, public utilities, finance, mining, service, construction, and agriculture. Next, each of these divisions is broken up into its chief groups. Manufacturing, for instance, is dissected into ten groups, metals, food, chemicals, textiles, lumber, printing, stone, leather, paper, and rubber. Earnings for individual corporations are not examined, as only group earnings were available. The charts are of the simplest type and easily understood. A glance at the table on page 35 will show that the author is correct when he says that the profit ratios for all divisions combined have been remarkably stable since 1922, but that the ratio for particular divisions has over the same period fluctuated greatly. It will also show that the ratio for all divisions has been comparatively small: 1922-3.95, 1923-4.53, 1924-3.76, 1925-4.74, 1926-4.42, 1927-3.74.

An attempt is made to show how the profit ratio varies between states (ch. XI), not for the purpose of proving however that it is more profitable to locate in one state than in another. The classification of profit ratios by the size of the corporation (ch. XIV, XV) is not satisfactory, as the author recognizes, for the only test of size available is the size of net income. Yet he believes that smaller corporations have in recent years been less successful than large ones (p. 313).

One of the interesting facts revealed is that while, as is generally known, approximately one-half of American corporations do not return a net income, yet 80 per cent of gross corporate business does yield a net return (p. 270). The size of this net return is however in most cases very small. It would be interesting to discover how many corporations avoid showing net income by paying their officer-stockholders large salaries so as to escape the federal corporation tax. "The great bulk of corporate enterprise is conducted by units which earn net incomes or have net deficits not differing greatly from zero" (p. 313). The number of highly profitable concerns is not large. In 1926 the great majority of companies returned less than 5 per cent on their total

assets, and this in a year generally regarded as unusually favorable.

Change and diversity, then, are quite characteristic of earnings of American corporations, taken individually. This lack of uniformity may be quite normal. While at present public utilities, trade, finance, and manufacturing show higher profit ratios than agricultural corporations and mining, and while for several years in the manufacturing group textiles and rubber were down, shortly the situation may be reversed. Fluctuations are at present most severe in the manufacturing groups, but this may not always be true.

The downward trend of the profit ratio for all divisions during 1925, 1926, and 1927 was partly due to an upward trend in gross income and a slight downward trend in net. But in agricultural corporations the denominator remained almost constant, the decline being due to changes in net. The author feels that much of the explanation lies in the movement of costs during this period. Very moderate declines in gross income, furthermore, may cause large decreases in net. "The recessions of 1924 and 1927, for example, while leaving only slight impressions on the volume of gross business, led to important reductions in net" (p. 300).

The author does not endeavor to explain the reasons for all the differences in earning power. That was not his purpose. But he has been successful in accomplishing what he set out to do with the information at hand. For an investigation on this subject the exposition is unusually clear and simple. The appeal of this book is widened because of the fact that, although the author is a statistician of high repute, the reader does not have to be an expert statistician to gain much of value from it. It seems sometimes as if in recent years the mathematical statisticians have been malevolently engaged in concocting diabolical formulas and equations which quite bewilder those of us who are not versed in that field. But in this book there is not a single formula, equation, correlation, logarithm, or any least squares. And for that the reviewer, at least, is profoundly grateful.

CHARLES S. TIPPETTS

University of Buffalo

The Financing of Business Enterprises. By AVARD L. BISHOP. (New York: Harper. 1929. Pp. viii, 616. $3.50.)

Most teachers of economics would probably agree that there is a lamentable scarcity of satisfactory texts in almost every special field of that subject. Those who desire a text which covers in a concise, well written, and well organized manner the subjects of business organization and finance will welcome the appearance of Professor Bishop's vol-

ume. So far as the reviewer has been able to ascertain, it makes no important contribution either in subject matter or method of treatment; but the author makes no such claim for it. It does, however, outline and discuss in a broad, general way most of the essential principles which students who are beginning the study of business finance should know. This text will have its greatest usefulness in a course which includes both business organization and business or corporation finance. For that purpose it will probably be very satisfactory. Where these subjects are not combined in one course but are given separately, more difficulty will be encountered in its use. Out of a total of 567 pages of text the first 148 pages are given over to the individual enterprise or proprietorship, the partnership, joint stock associations, Massachusetts trusts, the corporation, the holding company, and promotion. The remaining 419 pages cover what would usually be called the principles of business or corporation finance. Many teachers will consider this to be too brief a treatment for their purposes. Business failures, liquidations, and reorganizations, for instance, are discussed in one chapter of nineteen pages.

There are excellent chapters on choosing the state in which to incorporate (chapter IX), protecting the public from highly speculative and fraudulent securities (chapter XXVI), short-term borrowing (chapters XXVIII and XXIX), the administration of net income (chapter XXXI), and America becoming adjusted to "big business" (chapter XXXV). The author is on the whole favorable to "blue sky" laws. He rightly throws doubt upon the value of the cumulative feature of preferred stock (p. 181). He believes, however, that preferred stock makes a wide appeal to American investors, especially since such stocks have more and more come to resemble bonds in their protective provisions (p. 186). There is a good description of the effects of trading on the equity (pp. 190-4). In a footnote to page 440 it is asserted that the recent decrease in the supply of prime commercial paper is, in all likelihood, only temporary. This is probably correct. There may be some doubt as to whether the government is acting in so intelligent and discriminating a manner regarding recent mergers as the author would have us believe (p. 562).

The absence of dogmatic assertions is commendable, but on some points there is a regrettable lack of decisiveness. This is evident in the author's treatment of no-par stock (p. 173), his discussion of the best way of handling sinking funds (pp. 282-5), his conclusions as to the effectiveness and desirability of the Sherman and Clayton Anti-Trust laws, and the benefits of "big business." The author frequently states the arguments on both sides of an issue without reaching a conclusion. This will, no doubt, commend the book to many teachers. He tells us in the

preface that he has been teaching the subject to large classes of undergraduates for fifteen years and that he has had wide and varied experiences as a consultant or economic advisor to private business. In view of this, it is to be regretted that he has not included more illustrative material; for it must have been available to an author of his experience. In the judgment of the reviewer the value of this volume as a text would have been considerably enhanced by so doing.

There are very few footnotes. The author weakens the effectiveness of his style by making frequent use of such phrases as "It is reported that ——," "One authority (or banker or business man) says," without telling us who this authority is, "On the other hand," "There are those who assert (or believe or hold)," etc. The latter phrase occurs four times on pages 565-567. The inclusion of 26 pages of questions and problems at the end of the book will add to its usefulness in the classroom.

CHARLES S. TIPPETTS

University of Buffalo

Interpretive Accounting. By F. E. FOLTS and A. B. STILLMAN. (New York: Longmans Green. 1929. Pp. xiv, 432. $4.00.)

In a sense this work is not a text in elementary accounting. In the words of the authors, "its objective is to teach the use of accounting in business administration. It is aimed toward the business manager, and not toward the professional acountant." The result is "a definite divorcing of accounting theory from bookkeeping technique." This intention brings it about that in a book of 28 chapters the terms debit and credit are not introduced until the fifteenth, and the journal and ledger are not described until the sixteenth chapter.

The first half of the book is devoted to a study of the nature of business operations, the functions and needs of management, and the preparation and interpretation of financial statements. Chapters 13 and 14 are given over to a consideration of the three principal types of proprietorship. After the student has been introduced to bookkeeping technique, the book assumes a somewhat more ordinary aspect and treats of a number of special acounting problems such as short-time and long-time credit transactions, consignments, funds and reserves, organization and liquidation, and accounting for a manufacturing business. Considering the universal importance of installment business, it might be suggested that the failure to mention installment transactions is a serious omission. The mechanics of accounting are given the further concession of a chapter on adjusting and closing the books and three chapters on special journals and ledgers. The final chapter consists of two brief pages of text on choosing and using records, and contains the statement that "the student who has accomplished the various problems

of this text is competent to supervise the setting up of suitable books of account for almost any business." This seems a bit strong.

As the emphasis is not on accounting technique so also is it not on accounting theory. It is rather on the relationship of accounts to management, and the managerial uses of accounting data. The accounting theories followed are neither profound nor advanced, although they would probably meet with the approval of the majority of accountants. Reserves, for instance, may be "evaluation" accounts, liabilities, or proprietorship. An example of the last is an insurance reserve, which is described as being set up by means of debits to an insurance expense account and credits to the reserve. It is somewhat difficult to believe that a true proprietary reserve can be created through debits to a true expense account. The authors have none of the spirit of the crusaders. To show a reserve for depreciation as a proprietary item is mildly noted as "less desirable" than the more orthodox treatment; and, although the resulting overstatement of asset values is commented upon, the corresponding inflation of net worth is forgotten. In the preparation of the operating statement "gross trading margin" is substituted for the time-worn "gross profit," but after selling expenses are deducted the result is "net trading profit." If "margin" is preferable in the former case, it is fully as desirable in the latter.

For the purpose for which it is intended the work is unquestionably of merit. Explanations are clear and to the point. Numerous ingenious methods of illustrating accounting relationships are used. Where technique is stressed the guidance is patient and detailed. Questions and problems abound. No long-drawn-out laboratory type of problem is given. Such a thing would be out of keeping with the aims of the authors. The publishers are to be complimented on the appearance of the book, both inside and out. If a vote were taken as to the most beautiful textbook of the year this would be a leading candidate.

H. F. Taggart

University of Michigan

A Scientific Approach to Investment Management. By Dwight C. Rose. (New York and London: Harper. 1928. Pp. xiv, 440. $5.00.)

The return on one's fund of capital is largely dependent upon the type of management to which it is subjected. In a rather novel way the author here introduces the reader immediately to the heart of an important investment problem: the functions played by different types of securities in an investment program. With some justice the typical investment banker is criticized for his failure to consider, when offering his wares, the fundamental needs of his clientele. The solution lies in a more careful analysis of the individual investor's requirements either by

bankers who are willing to build their business on customer service and good will rather than on intensive selling efforts or by the employment of investment counsel, which is completely divorced from the selling of securities. The main thesis of the book is a plea for more intelligent management in the investment process.

There is a strong analogy between the function of investment and that of insurance. Both functions imply the assumption of risks, and it is possible to utilize actuarial principles in determining investment policies and measuring results in much the same way as in the field of insurance.

In measuring the results of managing any fund, it is necessary first to deduct from gross return the "cushion of rent," *i. e.*, the return that might have been earned had all investments been made in riskless commitments. This is defined as the rental value of capital. Whatever is made above the rental value of capital is in the nature of profit arising from a wise selection of risks. Conversely, should the return fall below the rental value of capital, an underwriting loss is reflected. As a basis for justifying those policies which are considered paramount to proper investment management, the author analyzes at some length the investment experience of selected insurance companies as well as the price history of certain classes of securities.

The method applied in studying the result obtained by insurance companies in their investment operations provides for deducting from both underwriting profit (or loss) and investment return, the rental value of capital employed. On the assumption that one-half of the aggregate assets of the business should be ascribed to the underwriting department, the deduction applicable in both cases was 2.14 per cent (the average rental value of capital being put at 4.29 per cent). Underwriting and investment returns combined showed an average annual gross return of 6.26 per cent for the 25 selected companies, or less than 2 per cent above the rental value of capital. Underwriting operations were conducted at a slight loss, while investment operations represented a business profit of 2.15 per cent above the rental value of capital. The combined return for the most successful company averaged 11.28 per cent, thus giving an annual business profit of 6.99 per cent, while the combined return for the least successful company averaged 4.73 per cent, or a true business profit of less than ½ of one per cent.

A partial explanation of the variation in return among different companies was sought in an analysis of their investment portfolios. Thus the most successful company carried an average of 61.2 per cent of all its investments in common and preferred stocks, against 25.1 per cent in bonds; and the least successful company carried only 12.3 per cent in common and preferred stocks against 73 per cent in bonds. A further study was made of the experience of the selected 25 insurance companies

in their stock and bond investment from 1908 to 1927. The average aggregate return on their bond holdings was 4.73 per cent; on their stock portfolio, 7.24 per cent.

An attempt was then made to isolate certain fundamental influences or inherent qualities in types of investment experience to determine whether or not they are of a permanent character that may be projected into the future. With this in mind the author reconstructed a series of indices of actual investment experience based on the specific securities used in compiling the several Dow-Jones averages. In the case of industrial stocks, for example, four indices were prepared for the period 1901-1928: Index A represents the average percentage change in the aggregate market value of the stocks used plus all stock dividends and subscription rights distributed, compounded semi-annually; Index D represents factors in Index A with the addition of all cash dividends distributed, compounded semi-annually; Index B represents all factors in Index D less the riskless rental value of capital, compounded semi-annually; Index C represents all factors in Index D compounded semi-annually less the riskless rental value of original capital. Similar indices were prepared for the railroad stocks used in the Dow-Jones averages; for legal railroad bonds; for second grade railroad bonds; for public utility bonds; and for industrial bonds. Finally, the several bond indices were combined.

This study is unique in that it enables a definite comparison of the actual investment returns which selected types of securities have yielded during the period under consideration. The stock indices reflect stock rights, split-ups, and stock dividends, a characteristic which most such indices lack. A further refinement in method which leads to an accurate portrayal of experience was effected by compounding results semi-annually: *i.e.*, the original fund in each case was constantly maintained in the selected securities, the amount invested in each security being equalized every six months.

The results of this study are striking. For the 1901 to 1928 period the average annual appreciation of the various types of securities based on the B index was as follows: industrial stocks, 8.84 per cent; railroad stocks, 2.90 per cent; legal railroad bonds, —0.08 per cent; second grade railroad bonds, .58 per cent; public utility bonds, 1.02 per cent; industrial bonds (1903-1928), .78 per cent; all bonds, .50 per cent.

Reasons were then sought for the pronounced and constant rate of appreciation in equity values. The three factors having the most significant effect on this appreciation are:

(1) Changes in the level of commodity prices.
(2) Changes in the level of interest rates (reflecting changes in the price-earnings ratio).

(3) Changes in earnings resulting from a varying volume of production or a varying percentage of profit.

The first two factors were combined into an index of appreciation P-I (Price-Interest) by multiplying the United States Department of Labor Wholesale Commodity Price Index by the inverted yield on 60 high grade bonds. The annual rate of appreciation of this index (P-I) was 2.10 per cent thus accounting for 25 per cent of the straight annual appreciation in industrial stock prices. The remaining appreciation is ascribed to increased earnings resulting from the ploughing back of excess earnings. Thus, the annual appreciation of Index D for industrial stocks (including reinvestment of cash dividends) was 13.20 per cent; while the annual appreciation of Index A (excluding cash dividends) was 7.80 per cent. The average annual amount paid out in dividends, by subtraction, was therefore 5.40 per cent. The average ratio of annual earnings to market price for the period was about 11.90 per cent. The difference between the amount paid as dividends (5.40 per cent) and the earnings to market ratio (11.90 per cent) equaled 6.50 per cent, which is assumed to be the annual reinvestment of earnings by the industrials studied. The average annual reinvestment of earnings of 6.50 per cent was not substantially below the average annual appreciation in Index A of 7.80 per cent. The conclusion is that "reinvestment of excess earnings above dividend payments was responsible for most of the growth in industrial stock values."

The preceding facts are of particular importance at present in view of the relatively high levels to which many stocks have risen. As the author states "industrial stocks could be purchased with confidence in the continuation of this long-term upward trend so long as the industries supporting civilization move forward; so long as the dividends represent a conservative portion of total earnings; *and so long as the major part of excess earnings is not discounted in a greatly inflated market value*" (italics mine).

Subsequent chapters are devoted to the construction of investment programs. The importance of diversification in industrial stocks is stressed. The part played by short-term and long-term bonds in different situations is analyzed, as well as the real function to be played by industrial common stocks. Particular emphasis is placed on investments for the purpose of maintaining purchasing power. While most of the newer treatises on investments draw attention to the need of protecting one's income against a loss in purchasing power resulting from price advances, the suggestion is here made that dollar income should be increased not only enough to offset a decline in the price level, but to improve one's own standard of living at the same rate experienced by society at large.

The book is, on the whole, exceptionally well done. All important charts and summary statements made in the text are adequately supported by original data which is set forth in several appendices. The book should have a particular appeal to those who are responsible for directing investment policies in respect to the funds, either of institutions or individuals.

The author rightly points out that the investor's future problem in respect to equity investments, made to protect purchasing power, is far more difficult today than it has ever been before. The recent interest in common stocks has forced prices to levels extraordinarily high in the light of past history. The formation of large investment trusts and the growth of investment counsel has put a premium on the better type of equity investment. The real significance of this development lies in its tendency to increase the odds against the small individual investor, or the investment committee which lacks vision or an analytical sense of values. Successful investment management today requires high ability and experience.

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NEW BOOKS

ALDERSON, W. *Cost accounting for distribution in retail grocery stores.* Official pubs., vol. XI, no. 3. (New York: National Assoc. of Cost Accountants. 1929. Pp. 119-128. 75c.)

ARMSTRONG, R. L. *Callable bond and stock values showing the yields and values of both bonds and stocks called or callable at a premium.* (Boston: Financial Pub. Co. 1929. Pp. 964. $40.)

BATES, W. *International committee of bankers and Mexican debt agreements: "the financial Monroe doctrine."* (New York: Mail and Express Printing Co. 1929. Pp. 16.)

BECHER, C. J. *Short cuts in business calculations.* (Appleton, Wis.: Author. 1929. Pp. 101.)

BENNETT, C. W. *Developing labor costs in the textile industry.* Official pubs., vol. XI, no. 2, section II. (New York: National Assoc. of Cost Accountants. 1929. Pp. 86-91.)

BLEDSOE, A. J. *Business law for business men, state of California: a reference book showing the laws of California for daily use in business affairs.* 13th ed., rev. and corr. (San Francisco: Bledsoe & Just. 1929. Pp. 1104.)

BRISCO, N. A., and others. *Retail credit procedure.* (New York: Prentice-Hall. 1929. Pp. 358. $5.)

BUNNELL, S. H. *Industrials: their securities and organization.* (Chicago: Shaw. 1929. Pp. vii, 334. $5.)

BURTT, H. E. *Psychology and industrial efficiency.* (New York: Appleton. 1929. Pp. xviii, 395. $3.)

CALKINS, E. E. *Advertising.* Reading with a purpose, no. 51. (Chicago: American Library Assoc. 1929. Pp. 32. 50c.)

Canning, J. B. *The depreciation element in burden estimates.* Official pubs., vol. XI, no. 1. (New York: National Assoc. of Cost Accountants. 1929. Pp. 1-14. 75c.)

Conway, A. *Investments of insurance companies.* Address before the National Convention of Insurance Commissioners, Toronto, Canada, Sept. 17, 1929. (Albany: J. B. Lyon Co. 1929. Pp. 20.)

Cook, J. B. *Ice accounting: a manual on uniform accounting for the ice industry.* (Chicago: Nickerson & Collins Co. 1929. Pp. 230.)

Designed by the Jonathan B. Cook Company, certified public accountants, for both large and small companies, including those combined with allied businesses.

Cragg, A. *Understanding the stock market: a handbook for the investor.* (New York: Greenberg. 1929. Pp xvi, 276.)

Crowther, S. *Money: how to make it, use it, invest it.* (Boston: Stratford. 1929. Pp. 204. $2.)

Dutton, H. P., editor. *110 tested plans that increased factory profits: ideas selected from the pages of Factory and Industrial Management as of particular value in practical factory management.* (Chicago and New York: McGraw-Shaw. 1928. Pp. 192.)

Eckhardt, H. W. *Accounting in the lumber industry.* (New York: Harper. 1929. Pp. 303. $6.)

Eggleston, D. C. *Auditors' reports and working papers.* Edited by H. T. Scovill. (New York: Wiley. 1929. Pp. 305. $5.)

Epstein, R. C. and Clark, F. M. *Trends in Buffalo real estate assessments, 1905-1928.* (Buffalo: Univ. of Buffalo Bureau of Business and Social Research. 1929. Pp. 48. $1.)

Ervin, S. *The law of building and use restrictions in Pennsylvania.* (New York: Clark Boardman Co. 1928. Pp. xliv, 362.)

Ettinger, R. P., Golieb, D. E. and Diamond, H. M. *Credits and collections.* Rev. ed. (New York: Prentice-Hall. 1928. Pp. xii, 520.)

Fisher, E. M. and Neihuss, M. L. *Catalog of long term leases in Detroit.* Mich. business studies, vol. II, no. 5. (Ann Arbor: Univ. of Michigan. 1929. Pp. 117. $5.)

Friedrich, C. J., editor. *Alfred Weber's theory of the location of industries.* English ed. (Chicago: Univ. of Chicago Press. 1929. Pp. xxxiii, 256. $3.)

Gade, G. A. *Hand-to-mouth buying and the inventory situation.* (Lansdowne, Pa.: Robert Morris Associates. 1929. Pp. 32.)

Gidney, H. A. *Methods of oil accounting.* Official pubs., vol. X, no. 20. (New York: National Assoc. of Cost Accountants. 1929. Pp. 1325-1342. 75c.)

Gray, J. H. and Terborgh, G. W. *First mortgages in urban real estate finance.* Pamphlet series, vol. I, no. 2. (Washington: Brookings Institution. 1929. Pp. 76.)

Griffin, A. B. and Alles, A. A., Jr., editors. *Mechanics' lien law of the state of New York, with important changes and amendments made by the Legislature of 1929, and working forms under new sections of statute, completely indexed.* Special assoc. ed. (New York: Assoc. for Revision of the N. Y. State Lien Law. 1929. Pp. 76.)

Grisell, T. O. *Budgetary control of distribution.* (New York: Harper. 1929. Pp. xvi, 99. $4.)

A business man's book. "The usual method of checking sales results has been against the major sales appropriation. This book develops the proposal that the only accurate way to analyze distribution expense is by making the distribution rate the dominant factor." The book is clearly written without padding.

HARTLEY, L. A. *Human engineering and industrial economy.* (Chicago: Author, c/o Marshall-Jackson Co., 26 S. Clark St. 1928. Pp. 367.)

HARVEY, R. S. *Rights of the minority stockholder and of the railway security holder.* (New York: Baker Voorhis. 1929. Pp. xxviii, 452.)

HAYES, M. V. *Accounting from the management viewpoint.* Official pubs., vol. X, no. 21. (New York: National Assoc. of Cost Accountants. 1929. Pp. 1351-1361. 75c.)

HEMINGWAY, W. H. *Financial chart, showing how to analyze and interpret balance sheets and profit and loss statements.* (San Francisco: Hemingway Inst., Mills Bldg., Montgomery St. 1929. $2.)

HILL, F. H., JR. *Computing cotton fabric costs.* 1st ed. (New York: McGraw-Hill. 1929. Pp. xi, 122. $5.)

HOYT, C. W. *Scientific sales management today.* (New York: Ronald. 1929. Pp. v, 253.)

HURST, S. N. *The Virginia business and legal guide for the business man and citizen.* Part 1. *A complete business guide or how-book.* Part 2. *An encyclopedia of Virginia law with an encyclopedia of business and legal forms.* (Appalachia, Va.: Hurst. 1928. Pp. xvi, 2363.)

JACKSON, J. H. *Auditing problems: a comprehensive study in principles and procedure.* (New York: Ronald. 1929. Pp. xvii, 534. $6.)

JONES, W. A. S. *Economics of the manufacturing business.* (London: Pitman. 1928. Pp. 154. 3s. 6d.)

KEYS, C. R. *Costs in airplane construction and transportation.* Official pubs., vol. X, no. 23. (New York: National Assoc. of Cost Accountants. 1929. Pp. 1413-1422. 75c.)

KILDUFF, F. W. *Capital facilities: accounting principles and methods.* Official pubs., vol. X, no. 22. (New York: National Assoc. of Cost Accountants. 1929. Pp. 1363-1373. 75c.)

KIMBALL, D. S. *Industrial economics.* (New York: McGraw-Hill. 1929. Pp. xiv, 312. $3.)

LINCOLN, E. E. *Applied business finance.* 4th ed., rev. and enl. (New York: McGraw-Hill. 1929. Pp. xxv, 826. $5.)

Changes have taken place since the third edition was published in 1925. "While on the surface business seems very sound, it may be that in this particular 'cycle' inventories have accumulated in the hands of *consumers*, instead of in producers' stocks. These inventories may be in the new form of automobiles and radios bought on the installment plan, houses financed by liberal credit margins, and stocks bought at inflated prices." In this edition the text has been thoroughly revised and in many places completely rewritten.

LOWRIE, J. A. *Operating results of Ohio wholesale grocers, year 1928.* Spec. bull. (Columbus: Ohio State Univ. Bureau of Business Research. 1929. Pp. 39, mimeographed. 50c.)

MCGARRY, E. D. *Retail trade mortality in Buffalo, 1918-20.* (Buffalo:

Univ. of Buffalo Bureau of Business and Social Research. 1929. Pp. 67. $1.25.)

Covers groceries, drugs, hardware and shoes.

MADDEN, J. T. and NADLER, M. *Foreign securities, public and mortgage bank bonds: an analysis of the financial, legal and political factors.* (New York: Ronald. 1929. Pp. xiv, 452. $6.)

MAGILL, R. F. *Cases on business organization.* Vols. I and II. (New York: Author, c/o Columbia Univ. 1929. Pp. 690. $7.25.)

MEARS, C. W. *Salesmanship for the new era.* (New York and London: Harper. 1929. Pp. vii, 229. $3.)

A book of advice and suggestions for the salesman.

MILLER, M. D. *Bank sales management; modern methods of obtaining new business.* (New York: Ronald. 1929. Pp. vii, 311.)

MOORE, J. H. *Handbook of financial mathematics.* (New York: Prentice-Hall. 1929. Pp. xvi, 1216. $10.)

It is stated in the preface that preparation of this book "was prompted by the discovery that many of the accountants and corporation officials who are actually confronted by different kinds of mathematical problems in the broad field of finance or investment and who are often under pressure to work out a solution quickly, have not had the benefit of formal training in mathematical analysis." It seems that the primary purpose of the book is to facilitate the solution of certain financial problems involving such factors as compound interest, annuities, and mortality rates by persons with very limited mathematical knowledge. As should be expected in a handbook, the derivation of the formulas is regarded as of secondary importance. The meanings of formulas are well illustrated by examples.

The first fourteen chapters of the book (pp. 1-375) are devoted mainly to the elementary treatment of interest, discount, annuities certain, sinking funds, and amortization. The treatment in this part is substantially an elaboration of more compact treatments presented in textbooks on mathematics of finance or mathematics of investment and taught rather widely in colleges.

Then follow nine chapters (pp. 376-583) on bond valuations which present much that is practical and that is not readily available in such compact form elsewhere. It seems to the reviewer that this part of the book will be found very useful. In particular, chapter 19 which presents a constructive criticism of the current practices of figuring bond prices between coupon dates, will be found especially useful and effective in promoting the more accurate valuation at such dates.

Chapter 25 on "Depreciation" and chapter 26 on "Building and loan associations" are fairly comparable with corresponding chapters in recent textbooks; but, on the whole, the treatment is less formal than in the usual mathematical textbooks.

Chapters 27-30 are devoted to probabilities and to life contingencies. The treatment of life annuities and life insurance does not carry the student so far as our recent textbooks on mathematics of finance. In fact, the treatment is concluded with formulas for premiums for some of the simpler types of life insurance without giving formulas for reserves; whereas the textbooks with which I have been making comparison give treatments of at least level net premiums reserved for some simple type of policies.

The book contains a large number of problems with answers. These will no doubt be found useful to serious students who wish to study a variety of applications.

H. L. Rietz

Myers, C. S., editor. *Industrial psychology.* Home univ. library of modern knowledge, no. 140. (London: Butterworth. 1929. Pp. 252.)

Neel, H. H. *Accounting for dairy products.* Official pubs., vol. XI, no. 2. (New York: National Assoc. of Cost Accountants. 1929. Pp. 73-84. 75c.)

Norton, H. R. *A text book on retail selling.* Rev. ed. (Boston: Ginn. 1929. Pp. 340. $1.60.)

Page, B. N. *Essentials of commercial law.* (Newtonville, Mass.: Jennings Pub. Co. 1929. Pp. 32. 20c.)

Palmer, L. E., and Bell, W. H. *Accountants' working papers.* Rev. ed. (New York: Ronald. 1929. Pp. viii, 313. $6.00.)

Phillips, G. H. *How to analyze a financial statement.* An address. (New York: N. Y. Board of Fire Underwriters, 85 John St. 1929. Pp. 7. 10c.)

Powell, R. R. B., compiler. *Materials for course in future interests and non-commercial trusts.* Vols. I-III. (New York: Ad Press. 1928.)

Presbrey, F. S. *The history and development of advertising.* (Garden City, N.Y.: Doubleday Doran. 1929. Pp. ix, 642. $7.50.)

Prickett, A. L. *Fixed property records: their forms and uses.* Official pubs., vol. XI, no. 4. (New York: National Assoc. of Cost Accountants. 1929. 169-204. 75c.)

Redfield, R. A. *The law of commercial paper.* (New York: Banking Law Journal. 1929. Pp. 600. $6.50.)

Reppy, A. and Tompkins, L. J. *Historical and statutory background of the law of wills, descent and distribution, probate and administration.* (Chicago: Callaghan & Co. 1928. Pp. xx, 427.)

Rhoades, E. L., editor. *Merchandising packinghouse products.* (Chicago: Univ. of Chicago Press. 1929. Pp. xi, 452.)

Richardson, W. P. and Hagendorn, W. V. *Outline of the law of suretyship and guaranty.* 2nd ed. (Brooklyn: Authors. 1929. Pp. x, 60.)

Rosenkampff, A. H., and Wallace, W. C. *Bookkeeping principles and practice: introductory course.* (New York: Prentice-Hall. 1929. Pp. xv, 303.)

Sears, J. H. *The new place of the stockholder.* (New York and London: Harper. 1929. Pp. xv, 260. $4.00.)

Seltzer, L. H. *A financial history of the American automobile industry.* (Boston and New York: Houghton Mifflin. 1928. Pp. xxi, 297. $3.00.)

Shearman, H. P. *Practical economics.* 2nd ed. (New York: McGraw-Hill. 1929. Pp. x, 466. $3.00.)

Smith, N. S. *Economic control: Australian experiments in "rationalization" and "safeguarding."* (London: P. S. King. 1929. Pp. xv, 306. 15s.)

Spencer, W. H. *A textbook on law and business.* (Chicago: Univ. of Chicago Press. 1929. Pp. 1125. $6.00.)

Stockwell, H. G. *Introduction to business management.* (New York and London: Harper. 1929. Pp. xiv, 276.)

Strain, M. M. *Industrial balance sheets: a study in business analysis.* (New York and London: Harper. 1929. Pp. viii, 182. $3.50.)

Deals with "procedure in statement analysis as distinguished from theo-

retical principles." Accounts are subjected to ratio analysis. Questions, exercises and a bibliography are provided.

TEAD, O. *Human nature and management.* (New York: McGraw-Hill. 1929. Pp. viii, 312. $3.50.)

THOMAS, P. E. *Sales engineering: a text on technical selling for students, sales engineers and managers.* Popular ed. (Chicago: Author. 1929. Pp. xxiii, 223.)

THOMAS, R. H. *The merchandising of petroleum products.* (Des Moines: Homestead Co. 1929. Pp. 231. $2.50.)

VAN VLISSINGEN, A., JR. *A survey on the effect of departmental consolidation on cost: office and factory.* Official pubs., vol. X, no. 24. (New York: National Assoc. of Cost Accountants. 1929. Pp. 1451-1465. 75c.)

WATKINS, R. J. *Industrial and commercial Ohio.* Vol. I, part 2. *The distribution and fluctuations of industrial and commercial activity in the non-manufacturing industries of Ohio.* (Columbus: Ohio State Univ. Bureau of Business Research. Pp. xviii, 426, mimeographed.)

WHITE, P. *Sales quotas: a manual for sales managers.* (New York: Harper. 1929. Pp. viii, 254. $4.00.)

As the sub-title indicates, this is a book for specialists. It is especially devoted to a consideration of the various kinds of quotas, the use of market analysis, and the methods of establishing quotas. Of interest to students of economic trends are the chapters on market indices and their significance.

WILKES, F. A., YORK, G. M., and TERRILL, C. J. *Elementary training for business.* Rev. ed. (New York: Ronald. 1929. Pp. xi, 351.)

WILLIAMSON, W. F. *The retail grocer's problems.* U. S. Dept. of Commerce, distribution cost studies no. 5. (Washington: Supt. Docs. 1929. Pp. 28. 10c.)

WILSON, C. W. *Production control of research projects.* Proc. of the Inst. of Manag., no. 11. (New York: Am. Management Assoc., 20 Vesey St. 1928. Pp. 20.)

WISSLER, W. *Material control and storeskeeping in foundries and machine shops.* (Columbus: Ohio State Univ. Press. 1929. $2.50.)

YOAKUM, C. S. *Business and the young accountant: vocational experiences of the college graduate.* Mich. business studies, vol. II, no. 3. (Ann Arbor: Univ. of Michigan. 1929. Pp. 42. 50c.)

In behalf of advertising: a series of essays published in national periodicals from 1919 to 1928. (Philadelphia: N. W. Ayer & Son. 1929. Pp. x, 266. $2.50.)

Accounting: ex parte no. 91, general revision of accounting rules for steam railroads. (Washington: Supt. Docs. 1929. Pp. 48. 10c.)

An analysis of investment banking for vocational guidance. (Chicago: Investment Bankers Assoc. of America, 33 S. Clark St. 1929. Pp. 62.)

Applying research to steady personnel. (New York: Metropolitan Life Insurance Co., Policyholders Service Bureau. 1929. Pp. 32.)

The authorized dealership plan for the plumbing and heating industries. (Detroit: Detroit Assoc. of Sanitary and Heating Contractors. 1929. Pp. 61. 50c.)

Classified production records and unit costs: a description of the methods to be followed in obtaining such data in the bookbinding industry. (New York: Employing Bookbinders of America, Inc., 141 Broadway. 1929. Pp. 64. $1.00.)

Commercial and industrial organizations of United States. Rev. ed. Domestic commerce ser. no. 5. (Washington: Supt. Docs. 1929. Pp. 272. 60c.)

Cost accounting for broad silk weavers: a manual. (New York: Silk Assoc. of America, Broad Silk Div. 1929. Pp. 263.)

Credit manual of commercial laws with diary, 1930. (New York: National Assoc. of Credit Men. $4.00.)

The Merchants' Association of New York: year book 1929. (New York: Merchants' Assoc. of N.Y., 233 Broadway. 1929. Pp. 378.)

The new competition and the independent retail merchant. (Fort Wayne, Ind.: Wayne Overall Co. 1929. Pp. 27.)

Operating results of retail stationers and office outfitters in 1928. Bull. no. 80. (Boston: Harvard Univ. Bureau of Business Research. 1929. Pp. viii, 35. $2.00.)

Outdoor advertising: the modern marketing force. (Chicago: Outdoor Advertising Assoc. of America, 165 W. Wacker Dr. 1928. Pp. 227.)

Practical business administration. Vols. I-XII. (Chicago: American Technical Soc. 1929. $39.80.)

Self-quiz reading course. Based on the library of *Practical business administration.* (Chicago: American Technical Soc. 1929.)

Standard financial ratios for the public utility industry. Bull. no. 26. (Urbana: Univ. of Illinois Bureau of Business Research. 1929. Pp. 44. 50c.)

Studies in securities. 3rd issue. (New York and Chicago: Jas. H. Oliphant & Co. 1929. Pp. 120.)

Survey of the current literature of industrial relations. (New York: Industrial Relations Counselors. 1929. Pp. 24.)

Trade practice conferences. (Washington: Supt. Docs. 1929. 25c.)

Capital and Capitalistic Organization

Mergers in Industry: A Study of Certain Economic Aspects of Industrial Consolidation. (New York: National Industrial Conference Board. 1929. Pp. xiv, 205. $3.00.)

The book is a statistical study of certain mergers in manufacturing and mining industries in the United States. They came into existence in pre-war times, almost all of them by 1902. They were important mergers when created; each was the largest single factor in its respective industry. If there were monopoly power in industry they possessed it. They were successful mergers to the extent that in one form or another they all continued throughout the pre-war period, and almost all of them have continued to the present. That the numerous mergers which speedily went to pieces during the same period are not included in the statistical averages of this book raises a question of statistical bias.

To segments from a quarter of a century of economic experience statistical tests are applied. We remember the hurried, short-time, unsatisfactory tests which were applied before the war. But this book is better timed. The tests are, applied directly to the mergers, rate of profits, change of value of common stock, efficiency of operative labor,

and expenditures for research. Then certain other tests are applied, not to the mergers themselves, but to the industries dominated by the mergers compared with industries in which there have been no mergers. These tests are unemployment and price changes.

The first two tests, profits and value of common stock, are of course biased by the non-inclusion of the mergers that went to pieces. The study of profits rather curiously ends with 1913. The book assumes, with reason, that true invested capital normally becomes in time a larger and larger proportion of nominal capital and surplus. Through the pre-war period the rate of profits compared with nominal capital and surplus tended to fall. Therefore the rate compared with the true invested capital fell by a greater degree. In pre-war times the mergers with whatever monopoly power they possessed were taking to themselves from the public a narrower and narrower margin of profit.

The second test, value of common stock, begins with the origin of each merger and continues through 1927. There are tables and graphs for the values of equivalent holdings of common stocks for forty-five mergers. The graphs are fascinating; for, as pointed out in the book, they show all possible shapes of capitalization values. It is difficult, studying them one by one, to see much influence of the general business cycles, that is, a connection between the average and the particular, so dominant are the facts peculiar to each merger compared with the facts common to the general business situation. We frequently hear the statement that stock values nowadays are selective. Stock values were always selective, and measuring selectivity by the variation of one stock to another stock in its year to year change, there was actually greater selectivity in the first years of the century than in the last years including 1927. But very likely that comparison is not fair; by 1927 the mergers had had time to mature. In this book the equivalent values of their common stocks are combined together in an arithmetic average. Using 1908-1910 as 100, 1927 is 516.9. This great change, however, should be weighted by the change of price levels, the increase of true invested capital, and the non-inclusion of mergers that speedily failed. It is interesting to note that if the median had been used instead of the arithmetic average, the result for 1927 would have been only 293.6. The sole reliance throughout the book on the arithmetic average limits the number of inferences that could be reasonably drawn.

The test for efficiency used was the production per operative laborer of the merger versus that of large competitors. This showed results favorable to the mergers but such a test seems to be biased for size, that is to say a larger company of the same average efficiency as a smaller company would be presumably more efficient per operative laborer and less efficient per overhead unit than its smaller rival. Though

we are assured that in this test the rivals of the mergers were large companies, they were presumably not as large; they had presumably less scope for specialization of labor. As to the other test, of course the mergers were shown to have spent more money for research per unit of output than was spent by the smaller companies.

Industries dominated by mergers had a higher average of monthly variation of employment but as time went on had a greater percentage of decrease of that average than was the case in industries in which there were no mergers. This decrease was the result of a few outstanding conquests of seasonal unemployment. For instance, the percentage of average monthly variation in the plate glass window industry had been in 1899, 26.48 and in 1904, 24.56. But by 1923 it was 3.89 and by 1925, 3.29. Against this splendid showing stood the fact that one-third of the industries dominated by mergers had increased their rate of seasonal unemployment.

But the last test, the change of price, is the most challenging. A chart is given in which the arithmetic average of prices of the products of industries dominated by mergers is less than 29 per cent higher in 1925 than in 1900, while the prices in the industries in which there were no mergers rose by more than 117 per cent in the same period. In the book this favorable showing is explained first as the result of more research, and second, as caused by the economies of vertical combination; then the third explanation given is that the industries in which there are mergers are more apt to be "mechanical industries." Now it is worth while listing the products of industries dominated by mergers in which the prices absolutely decreased. They are: aluminum, borax, copper, nickel and sulphuric acid. On the other hand, the products of industries in which there were no mergers and in which the prices more than doubled are: bricks, canned fish, carpets, chinaware, cotton goods, flour, furniture, lumber, shoes, table cutlery, turpentine and wrapping paper. It would seem that mergers might be only a minor cause in the difference of price movements between these two groups. But even though we may believe that the graph presented vastly exaggerates the beneficial effects of mergers on prices, we should still have very great difficulty by any grouping of comparable items to make a plausible case for the opposite assumption that mergers have increased prices over the last quarter of a century. The monopoly price which we teach in the classroom is not very conspicuous in real life in the United States, and cannot be traced at all over sizeable blocks of time.

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NEW BOOKS

Barnes, I. R. *Aspects of public utility regulation in Massachusetts.* (New Haven: Yale Univ. Press. 1929. Pp. 284. $3.00.)

Euler, L. J. *Manual of monopolies and federal anti-trust laws.* (Chicago: Callaghan & Co. 1929. Pp. 328. $5.50.)

Mosher, W. E. *Electrical utilities: the crisis in public control.* With the assistance of the staff of the School of Citizenship and Public Affairs, Syracuse Univ. (New York: Harper. 1929. Pp. xx, 355. $4.00.)

Moulton, H. G., Morgan, C. S., and Lee, A. L. *The St. Lawrence navigation and power project.* (Washington: Brookings Inst. 1929. Pp. xvi, 675. $4.00.)

Rosbrook, A. I., editor. *White on corporations.* Vol. I. *General corporation law.* (Albany: M. Bender. 1929. Pp. 1024.)

Saliers, E. A. *Handbook of corporate management and procedure.* (New York: McGraw-Hill. 1929. Pp. 1264. $7.50.)

Smith, J. B. R. *New York laws affecting business corporations.* 10th ed., rev. in April, 1929. (New York: U. S. Corporation Co. 1929. Pp. 465. $2.00.)

Vartanian, P. H. *The law of corporations in West Virginia: a handbook.* (Charlottesville, Va.: Michie Co. 1929. Pp. xv, 719.)

Corporation laws of New York. Rev. to October 1, 1929. (New York: Corporation Trust Co. 1929. Pp. 104, 104a-104b, 105-237.)

Delaware corporations. June, 1929, ed. (New York: Corporation Trust Co. 1929. Pp. 33.)

Gestion des entreprises publiques et privées aux pays-bas. Rapport à la Chambre de Commerce Internationale établi par les soins du Comité National Néerlandais. 1929. (The Hague: Martinus Nijhoff. 1929. Pp. xviii, 96.)

An inquiry as to the relative value of private or governmental enterprise in the field of public utilities, including electrical, gas, water, transportation and mining. No positive conclusions are reached.

Public utilities: a survey of the extent of instruction in public utilities in colleges and universities, of the industry's interest in college graduates and of willingness and ability of utilities to coöperate with higher educational institutions. (New York: National Electric Light Assoc. 1929. Pp. x, 154.)

This is a report of the Educational Members of the Coöperation with Educational Institutions Committee of the National Electric Light Association. Professor C. O. Ruggles was director of the survey, assisted by 15 college representatives. Personal visits were made at a large number of universities; and questionnaires were used in the light and power industry. The material here gathered will prove suggestive and helpful to teachers in the varied fields of economics.

Standard Public Service Company: furnishing telephone or water service to 168 communities in 10 states. (New York: Standard Public Service Co. 1929. Pp. 27.)

Labor and Labor Organizations

The Labor Movement in the United States, 1860-1895. By Norman J. Ware. (New York: Appleton. 1929. Pp. xviii, 409. $3.00.)

This is the second of a trilogy of volumes on American labor history planned and thus far executed by Professor Ware. The first, entitled *The Industrial Worker, 1840-1860,* appeared in 1924 (reviewed in the American Economic Review, vol. xiv, pp. 732-733); and the third, bringing the record down to date, is now in preparation. The present study centers upon the Knights of Labor, dealing only briefly with the shadowy predecessors of the "Noble Order" and including only such part of the history of its successor as has significance for its decline and disappearance. The socialist movement of the period is largely neglected upon the ground that it was mainly an importation.

The author has evidently made such painstaking examination of the dry bones of "proceedings" and "journals" that few of his readers will care to check him up or be inclined to dispute his findings. Indeed, some may think that, particularly in the earlier chapters, the artificial enthusiasm of the researcher has led him to include too many details about the petty bickerings and squabbles of obscure and long-forgotten groups and leaders. But Dr. Ware holds that personalities and the quality of leadership have been major factors in determining the fortunes of labor organizations and thinks that the fate of the Knights was sealed by their persistent and mistaken loyalty to a "windbag" like Powderly and by the pernicious machinations of the "Home Club" in New York.

It is, of course, customary for a new treatise to attempt to justify its existence by indicating grave errors of fact or interpretation in previous discussions of the same subject, and we find something of that tendency here. Practically the only new material accessible to the author was the letters of Powderly as general master workman to John W. Hayes as secretary; and these, while none too reliable as sources of information, do enable him to give us a somewhat clearer idea of the mental processes of the leader. The following are some of Dr. Ware's more belligerent sentences, directed especially toward Professor Commons and his associates in writing *The History of Labour in the United States:*

Professor Ely wrote when the Knights were at the height of their power and prestige, and he looked kindly upon them. Professor Commons wrote when the Federation was in the saddle, and he was not enthusiastic about the Knights—which proves only that even economists are human. . . . . There was nothing inevitable about the failure of the Knights and the success of the Federation. Explanations of both can be found in the circumstances and the men. The economic interpretation of history, even or especially for labor organizations, has been overdone. . . . . In a sense the American Federation of Labor was not an advance of the American labor movement, but a strategic

retreat of a few craft unions disturbed for their own safety by the remarkable but "unhealthy" growth of the One Big Union. . . . . It is always a mistake to write history, as it were, *post facto,* to look at the American labor movement through the eyes of the American Federation of Labor. . . . . Professor Commons has suggested (reference not given) that the extraordinary growth of 1886 was due to the "rush of the unskilled into the Order," and has explained the opposition of the trade unions to the Knights largely upon this fact. . . . . The complaint of the trade unions was that the *unions* (themselves) were rushing into the Order, as they undoubtedly were.

But actual comparison of the respective accounts does not reveal many significant disagreements; and by the time Dr. Ware has completed his third volume they may be still fewer. No authoritative historian of labor in America holds that the progress of the movement has always been in a straight line forward and upward or that the whole of human wisdom has been crystallized in any one body or carried under the "lid" of a single leader. Unionism has rather been a kind of spiral development in which the excess of one tendency has provoked a reaction toward excess in another direction and in which there have been painful periods of apparent quiescence if not of retrogression. If, as Dr. Ware shows, the Knights were in their beginnings and throughout the greater part of their course primarily a collection of trade groups, they nevertheless, especially from 1886 on, departed more and more from this pattern and could not but come into conflict with those business unions which were now taking on a new lease of life and developing national organizations with real power in them. It is not just to imply, as the author seems to do in one or two places, that craft unionism had at this stage already been fully tried and found wanting, or that, but for the perversity and "will to power" of Samuel Gompers, the growing national unions could ever have found a refuge or safe abiding-place within the bosom of the Noble Order.

There is much overlapping and repetition in the different chapters; but some liberties in the matter of organization may be permitted to a book that does not pretend to be chiefly a text. Those chapters which take up separately the principal phases of the history and policy of the Knights—their relationships with the Church, their internal conflicts, their efforts in the field of coöperation, their dabbling in politics, and their encounters with the unions and the Federation—constitute the vital and interesting part of the study and may all be regarded as acts and scenes leading up to that final dénouement where the General Master Workman is ready to concede that the Order is in "the throes of dissolution," and John Hayes, "latest left of all the knights," is represented stowing away the useless records in a leaky shed in Washington.

Warren B. Catlin

Bowdoin College

Present-Day Labor Relations. A Critical Examination of Methods of Collective Negotiations between Employers and Employees. By Paul F. Gemmill. (New York: Wiley. 1929. Pp. ix, 312. $3.00.)

On the whole Dr. Gemmill has done a good piece of work in carrying out his major purpose of presenting "a short, non-technical treatment of labor relations in the United States." One hopes, however, that even the average student and business man will not take the author too seriously when he advises them that they can probably "learn from these pages as much as they will need to know about labor relations of these kinds." They will do better if they let Dr. Gemmill's book stimulate them to read further in the field.

In two chapters covering 52 pages Dr. Gemmill considers trade unionism: (I) "Aims and methods of trade unionism"; (II) "Unionism and the public welfare." So short a treatment inevitably suffers by having to gloss over those important variations between unions, industries, trade agreements, which often constitute the inner essence of so complex a subject.

A much more adequate discussion is given to employee representation in six chapters covering 185 pages: (I) "What is employee representation?"; (II) "The objectives of employee representation"; (III) "Employee representation at work"; (IV) "Gains through employee representation"; (V) "Union criticism of employee representation"; (VI) "The literature of employee representation."

The author draws upon the investigations that have been made during the past decade into the operation of various company unions. Some of the facts may be out of date by now, since the field work in at least certain of the studies was done as far back as 1921. Dr. Gemmill's contribution would naturally have been more valuable had he personally visited the companies whose plans he discusses, and brought the story up to date.

The chapter on "The literature of employee representation" is a valuable critical summary of the most important work which has appeared to date on the subject. Perhaps it would have been better, however, to have published this reprint of an article in the *Quarterly Journal of Economics* as an appendix, rather than as a chapter, since it repeats some of the material contained in other chapters of the present volume and does not always appear to be an organic part of the study.

The third part of the book is devoted to a consideration of "Industrial democracy" through two chapters dealing with: (I) "Union-management coöperation"; (II) "Steps toward industrial democracy." The first concentrates mainly on the Baltimore and Ohio plan. As indications

towards industrial democracy, Dr. Gemmill cites in the second chapter the plans of the Dutchess Bleachery, the Columbia Conserve Company, Dennison Manufacturing Company, the A. Nash Company, Inc., William Filene's Sons Company, and the Philadelphia Rapid Transit Company. These are only steps toward democracy in industry; and measured by any adequate standards of democracy, the author finds most plans of employees' representation wanting.

Dr. Gemmill supplies a good bibliography and index.

The present reviewer agrees heartily that "it seems to be about time to stop talking of industrial democracy as a thing that has been realized, or is about to be realized, and admit that it is a dream of the future, and probably of the far distant future." But he can hardly agree that sufficient data have as yet been gathered to justify the conclusion that "industrial unionism seems to be the most likely agency for the attainment of industrial democracy under private ownership; for this form of labor organization is one that not only supplies the workers with the bargaining power essential to the protection of their rights, but also insures that all employees in an establishment shall be represented. If the coöperative idea of the Baltimore and Ohio plan were combined with industrial unionism, it would seem that all of the advantages of trade unionism, employee representation, and union-management coöperation should result."

This may be. But surely scientific—and practical—caution would counsel our awaiting many more intensive studies both of industrial unions and union-management coöperation plans before any such conclusions as to the "most likely agency for the attainment of industrial democracy" are hazarded.

Ben M. Selekman

Labor and Internationalism. By Lewis L. Lorwin. (New York: Macmillan. 1929. Pp. xviii, 682. $3.00.)

During the dozen years which have elapsed since the Russian Revolution, the international labor movement has been given a complete if doleful opportunity of testing in the crucible of reality practically all of its time-hallowed assumptions and premises. These years witnessed, notably in Germany, first a severe crisis in capitalism, then its rebirth as a more highly integrated industrial system, with power for resistance and prestige which will long continue as the wonder of students. The very divorcement of management from ownership, from which the older socialism had anticipated a decisive weakening of capitalism, has in reality turned out to be the basis of a new and more flexible capitalism, capable of viewing itself as a unit and of collective action. Furthermore, the related processes of trustification, cartellization and "rationaliza-

tion" have already stepped decisively beyond the boundaries of a single nation, even if economic nationalism has never been stronger since the time of Colbert.

But while post-war capitalism has tended towards a greater integration, the labor movement has taken the opposite direction. The unity and solidarity of all labor, the unquestioned foundation of the pre-war labor *credo*, which was then fully expressed in *united* national labor parties and trade union federations and, above all, in *united* socialist and trade union internationals, gave way to a veritable "balkanization." For so intricate have the relations become between the disunited post-war labor groupings, with their innumerable mutally hostile or "conciliatory" moves, that even the student who has conscientiously tried to follow those moves as they were made finds upon reading the admirable account of them in Dr. Lorwin's book how surprisingly much had evaporated from his memory.

Dr. Lorwin's *Labor and Internationalism* is the best book in any language, so far as the reviewer knows, where the post-war international labor history is chronicled with adequate completeness and with fine analytical understanding. Dr. Lorwin, whose study of French syndicalism, although a decade and a half old, is still the most authoritative one in the field and whose history of unionism in the women's garment industry continues as a model of its kind, brought to this work a first-hand knowledge of international economics and a thorough grasp of socialist and labor theory. The reviewer knows of no place where the reader will find the tenets of the several schools of revolutionary thought summed up with the painstaking accuracy and the lucidity of exposition which characterize Dr. Lorwin's chapters. At the same time his impartiality is shown best in the chapters dealing with the rôle of Gompers in international labor relations and with the Pan-American Federation of Labor. The following selected chapter headings will indicate something of the broad scope of the work: "International labor secretariats," "The anarcho-syndicalists," "The voice of the Christians," "The economics of N. E. P.," "The Chinese dragon and the British lion," "Socialism in our time," "How the International Labor Office works," and "'Monolith' and factions" (in the chapter on "The Third International and its satellites").

It is not the least of the author's deserts that despite the extraordinary breadth of his canvas he has succeeded in presenting the innumerable detailed developments, from Shanghai to Mexico City, as relevant parts of one world-wide moving panorama—as witnessed by the following headings: "World upheaval, 1919-1920," "Retreat and confusion, 1921-1923," "Moods of transition, 1924-1926," "Internal crisis, 1926-1927," and "Adjustments and realignments." But Dr. Lorwin's treat-

ment is more than well connected. For, while he felt obliged to bring in virtually every issue and grouping in the world of labor over a dozen years, he succeeded in focussing his treatment upon ideas and actions of indisputably international nature. To him the similarities in the labor philosophies and labor practices in the different countries do not as yet constitute labor internationalism. He understands his field as covering a study of those activities and institutions of the world labor movement which arise out of the process of adjusting the conflicting or coöperative interests and purposes of states and nationality groups within states. For instance, a study of the activities of labor federations of the several countries for the purpose of bringing about a greater uniformity in collective bargaining throughout the world undoubtedly comes under the head of international labor relations. But a comparative study of collective bargaining in the principal industrial countries is not a study in the sphere of *international* labor economics.

The last chapter deals with "Horizons ahead." The author notices a series of dualisms in the labor movements which leads to disunity. First the tendency to "labor nationalism" and away from the original internationalism. That dualism has its roots in the conflict between the worker's interest in the prosperity of his national industry, which determines his wages and other working conditions, and "his quality of human being and citizen which prompts him to seek salvation for himself in larger social ideas and policies." This dualism is really a part of a larger one between "immediate demands" and "social ideals."

A most serious cause of the existing disunity in the world of labor is the variety in type of national labor movements due to the varying general character and tempo of industrial life of the several nations.

> In an industrially developed and dynamic country, the worker is moved more by the hope of immediate security and of economic advancement through his trade and is inclined towards conservative trade unionism. In industrially declining countries he is moved by a strong sense of insecurity and is ready for more radical and militant forms of action. A similar predominance of radical ideas and methods is found in new industrial countries, where large social visions serve as a stimulus to collective action; while in static countries, where a relative sense of security exists, the worker is inclined to think more in terms of citizenship and human values than in those of trade interests. As the industrial character of a country changes, its labor movement changes, becoming more or less conservative or aggressive in accordance with changing conditions, but the division of the labor movements of the separate countries into types persists.

Dr. Lorwin holds out the hope that—notwithstanding the inherent limitations upon international labor action due to the need to operate within a "world system based upon rival economies and competing national interests," and due to the inheritance of national structures,

national traditions and national points of view—labor internationalism is bound to occupy an ever larger place in the international scheme, whether the particular organizations now in existence survive or collapse.

The reviewer has no fault to find either with Dr. Lorwin's analysis of labor internationalism or with his prognosis, except that he perhaps would give even stronger emphasis to the worker's job and wage consciousness as compared with his "quality of human being and citizen which prompts him to seek salvation for himself in larger social ideas and policies." Furthermore, he would differentiate between the trade unionist's mentality, which starts with the former and tends only partially to absorb the latter, and the intellectual's mentality, to which the worker's original and ingrained job interest is remote and even repugnant. It is the reviewer's opinion that, given a labor movement of sufficient age and maturity to have brought forth a leadership from the ranks of the wage earners themselves rather than a labor movement which proceeds under an intellectual leadership, it will be the trade unionist's mentality which will determine fundamental policy, as a regular occurrence or at least at critical "show downs." Moreover the very diversity of national types of labor movements, provided mere verbiage is disregarded and only "behavior" is taken into account, is at bottom the product of the varying degrees of labor's emancipation from an intellectual leadership. The intellectual, whose influence in the labor movement will increasingly be cultural instead of goal determining, will make his contribution to a future international order in proportion as he succeeds in ridding himself of any attitude of superiority towards the trade unionist's perfectly natural job and wage consciousness.

SELIG PERLMAN

University of Wisconsin

The Problem of Industrial Relations and Other Lectures. By HENRY CLAY. (New York and London: Macmillan. 1929. Pp. ix, 322.)

The book deals with England's attempt to control labor relations during and after the war, followed by an estimate of the direction that government control should take in the future. As is true of many volumes consisting of compilations of lectures, one does not find the directness and correlation that would be present if the information were prepared as a single thesis; nevertheless, the analyses presented are fundamental and much worth while. The reasoning is that of an economist who is trying to make an impartial, critical evaluation of a very complex situation. For that reason, the book will be refreshing to many American readers who have been surfeited with accounts of how to simplify, specialize and standardize labor.

Previous to the opening of the war, according to the author, the ordinary pressure of competition was sufficient to keep contractors from raising wages unduly; in fact, government effort went into assuring the payment of sufficient remuneration. With the outbreak of the war, competition for labor became keen, although in the last analysis the government, not the contractors, paid the increased wages. The government could not control wages both because of the existing diversity and the fact that the government boards were insufficiently unified to make such practice feasible. Practically, a policy was adopted of increasing wages where pressure was most intense and the need of production paramount. As the war proceeded, the government was driven more and more towards direct administration of labor conditions.

In the leveling up process, the wages of many, especially the unskilled, were forced out of line with previously existing economic relationships. Consequently, with the advent of peace, a reëstablishment of many of the old relationships has become necessary, and it is to this cause that the author attributes many of the labor difficulties of the present time. He sees no hope for a cessation of such troubles until various industries have readjusted themselves to their normal economic levels.

According to Professor Clay, the Joint Councils proposed by the Whitley Committee were never intended as a general industrial panacea, but were proposed for certain of the better organized trades such as engineering, coal, and textiles, where both employers and employees were in a position to profit by such machinery. These industries, however, were not favorably disposed. On the other hand, some of the weak, unorganized trades seized on the Whitley plan as a means of improving their status; but, having neither the machinery nor experience to handle such methods, the results were unsatisfactory.

Government intervention in trade disputes is discussed at some length. The author's conclusion is that it is much better for the respective trades to settle their own difficulties by means of national awards. Lectures on the "Authoritarian element in distribution," "Property and inheritance," "The distribution of capital in England and Wales," and "A word for 'laissez faire' " complete the volume.

The book is confined almost entirely to conditions in England, and as an explanation of war-time and present-day conditions it is a desirable contribution. American readers will doubtless be struck by the fact that while British labor has been experimenting with government control and regulation of labor disputes, the United States has done little in that direction. The reviewer wonders if the fact that British labor is politically organized has not been a factor having to do with English government control, and if it does not explain in part why American labor

has regained its equilibrium more quickly, although there are, of course, other reasons more obvious.

E. C. Robbins

Graduate School of Business Administration, Harvard University

NEW BOOKS

Beckner, E. R. *A history of labor legislation in Illinois.* (Chicago: Univ. of Chicago Press. 1929. Pp. xiv, 539. $4.00.)

Beyer, O. S., Jr., and others. *Wertheim lectures on industrial relations, 1928.* (Cambridge: Harvard Univ. Press. London: Humphrey Milford. 1929. Pp. viii, 229. $3.00.)

Bezanson, A., and Gray, R. *Trends in foundry production in the Philadelphia area.* Wharton School of Finance and Commerce, research studies III. (Philadelphia: Univ. of Pennsylvania Press. 1929. Pp. xvi, 77. $1.50.)

Blackett, O. W. *Factory labor turnover in Michigan.* Mich. business studies, vol. II, no. 1. (Ann Arbor: Univ. of Michigan. 1928. Pp. 38. 50c.)

Broach, H. H. *Union progress in New York: story of the modernization of union structure and business methods in the electrical field.* (New York: Internat. Brotherhood of Electrical Workers, Local Union no. 3. 1929. Pp. 71.)

Brundage, D. K. *Sickness among industrial employees.* Reprint no. 1266 from Public Health Reports. (Washington: Supt. Docs. 1929. Pp. 17. 5c.)

Cole, G. D. H. *The next ten years in British social and economic policy.* (New York: Macmillan. 1929. Pp. 480. $5.50.)

Davis, J. D., editor. *Labor speaks for itself on religion: a symposium of labor leaders throughout the world.* (New York: Macmillan. 1929. Pp. 265. $2.00.)

Donnelly, T. J. *Report of the legislative agent of the Ohio State Federation of Labor.* 88th session of the General Assembly of Ohio. (Columbus: Ohio State Federation of Labor. 1929. Pp. 44.)

Fine, N. *Labor and Farmer Parties in the United States, 1828-1928.* (New York: Rand School of Social Science. 1928. Pp. 445.)

Any satisfactory treatment of the history of third party movements in the United States requires a more comprehensive and thorough knowledge of economic and political history than the author discloses, with the result that he has given us a narrow presentation of the history of labor and farmer parties unrelated to the major forces and movements which characterize American development. His approach to the subject is quite distinctly from the standpoint of labor and reveals a too superficial knowledge and lack of comprehension of the farmer and his problems.

The subject matter is divided into thirteen poorly planned chapters interlarded with numerous quotations. The absence of a preface or introduction explaining the author's purpose in undertaking this study may be excused; but the omission of footnotes supporting the text is open to criticism. There is no bibliography. The index is brief but adequate.

Louis Bernard Schmidt

GANGEMI, L. *Il problema della durata del lavoro. L'ideologia internazionale ed i fatti nazionali: la soluzione nazionale del governo fascista.* (Florence: Vallecchi. 1929. Pp. xv, 526. L. 25.)

GARDNER, E. D., and PARKER, D. J. *Safety organizations in Arizona copper mines.* U. S. Dept. of Commerce, technical paper 452. (Washington: Supt. Docs. 1929. Pp. 49. 10c.)

JOHNSON, O. M., and LAFARGUE, P. *The spy in the labor movement.* Arm and hammer pamphlets. (New York: N.Y. Labor News Co. 1929. 5c.)

KASKEL, W. *Die Arbeitsgerichtsbarkeit.* Arbeitsrechtlichen Seminarvorträge, Band IV. (Berlin: Julius Springer. 1929. Pp. vi, 360. R.M. 26.)

———. *Arbeitsrecht.* 3rd. enl. ed. Enzyklopädie der Rechts- und Staatswissenschaft, Band 31. (Berlin: Julius Springer. 1928. Pp. xxii, 432. R.M. 18.80.)

LEESE, C. *Collective bargaining among photo-engravers in Philadelphia. Ordinary methods applied to an occupation which is both an art and a manual trade.* (Philadelphia: Univ. of Pennsylvania Press. 1929. Pp. xiv, 220. $2.50.)

MANGOLD, G. B., and HILL, L. B. *Migratory child workers.* Reprints of speeches presented at the 25th annual conference of the National Child Labor Committee in San Francisco, June 28, 1929. (New York: National Child Labor Committee, 215-4th Ave. 1929. Pp. 16.)

MILNE-BAILEY, W., editor. *Trade union documents.* (London: G. Bell. 1929. Pp. xxvii, 552.)

POSADA, A. *La organización científica del trabajo.* Pub. no. 12. (Madrid: Soc. para el Progreso Social. 1929. Pp. 31. 1.50 ptas.)

SCHNITTKIND, H. T. *The story of Eugene Debs.* (Boston: National Education Committee, Independent Workmen Circle. 1929.)

SELEKMAN, B. M., and SELEKMAN, S. K. *British industry today: a study of English trends in industrial relations.* 1st ed. (New York and London: Harper. 1929. Pp. 290. $3.00.)

TAYLOR, P. S. *Mexican labor in the United States Valley of the South Platte, Colorado.* Univ. of Calif. pubs. in econ., vol. VI, no. 2. (Berkeley: Univ. of California Press. 1929. Pp. 95-235. $1.80.)

The American labor year book, 1929. Vol. X. (New York: Rand School of Social Science. 1929. Pp. 302. $2.50.)

Directory of public employment offices. (Washington: Supt. Docs. 1929. Pp. 19.)

Employee thrift and investment plans. (New York: National Industrial Conference Board. 1929. Pp. xi, 114.)

Saving has been difficult for the American worker; and emergencies have usually found him financially embarrassed. This report assumes that saving is desirable, and, for the American worker at least, possible. While brief mention is made of the possibility of over-saving and a curtailed market (p. 2), no consideration is given to the Shavian dictum that it is "wicked for the poor to save." This report is the result of an investigation conducted by Miss F. Beatrice Brower, of the National Industrial Conference Board's Research Staff, under the supervision of the Board's Staff Economic Council. The data were made available through the courtesy of 319 companies, which, according to the selected list, are fairly representative, although the public utility companies seem to be amply represented. These 319 companies had 1,322,517 employees.

The plans for systematic saving have assumed a variety of forms; but the report groups them under three distinctive headings. First, savings plans in coöperation with banking institutions. This was the most common type including nearly a half-million employees. Of the 187 plans providing for savings in banking institutions, 115 provided for payroll deductions; Christmas and vacation savings plans furnished forty cases, while the others were scattered. Four plans provided for insurance, and there are arguments for this type when there are dependents in the family. The automatic-payroll deduction type of savings seems to be the most successful, because of smaller dependence on the worker's initiative.

The second distinctive type of saving is described as the "employer-employee savings and investment plan." Here the employees' savings are handled either by the employer, or employees, or by a joint committee representing both. Four variations of this second main distinctive type, including 427,233 employees, are found as follows: (1) Savings invested in the company's business; (2) thrift certificates; (3) savings through investment trusts; and (4) investment funds supplemented by employer contributions. Investment in the company or in industrial stocks is a common feature here. The report describes forms of this main type as the most dangerous of any studied, for so much depends on the management of the funds and of the companies. The success attending many of these ventures may discredit somewhat the statements of some of our economists —notably Fairchild, Furniss and Buck—who say that workers depending on their savings for a rainy day should not invest in industrial stocks.

In the third general type savings are combined with loans in which 400,570 workers participated. When interest rates on wage assignments and chattel loans reached 240 and 520 per cent, as reported by the attorney general of New York State during the winter of 1927-1928, then the importance of loans to workers at a 6 per cent rate is realized. The outstanding example of short-time savings and loan combination is the credit union, and a brief story is given of this important development. The greatest value of the credit union lies in its loan to members. Followers of compulsory health insurance may find a point in the observation of the United States Bureau of Labor Statistics, in the *Monthly Labor Review* for July, 1927, that one-fourth of 4,000 loans studied were taken out to pay expenses incident to sickness. To the reviewer a surprising feature of the credit union was the small percentage of losses. For example, in the eleven years of operation of the credit union for municipal employees of New York City, only $40 was lost in uncollectible loans out of a total of $10,400,000 loaned. Furthermore, there have been fewer garnishments from installment houses since the inauguration of the credit union. After a period of membership, members are changed from spenders to savers, so the unions have a large surplus in the banks or must invest in securities.

An interesting discussion is also given concerning building and loan plans for industrial workers and other saving and loan plans. Six appendices covering 35 pages give samples of various plans in operation. Some companies have more than one plan.

Among the conclusions reached in the report the reviewer finds that the loan features added to the attractiveness of savings, but were not essential for the success of the plan; that the greatest hindrance to the success of savings plans is the apparent indifference and apathy on the part of the

workers; that the employer should not try to take a prominent position in management even though his advice is essential; and that the outstanding benefits of the savings plans include thrift habits for the workers and more harmonious relations between employer and employees. improved morale and reduced turnover.

JOHN B. EWING

Forced labour: International Labour Conference, fourteenth session, Geneva, 1930. Questionnaire 1. Supplementary report. (Geneva: International Labour Office. 1929. Pp. 73, 27.)

Hours of work on board ship: collection of laws, regulations and collective agreements. Studies and reports, ser. P, no. 3. (Geneva: International Labour Office. 1929. Pp. xvi, 280. 6s.)

Hours of work of salaried employees: International Labour Conference, fourteenth session, Geneva, 1930. Questionnaire 2. (Geneva: International Labour Office. 1929. Pp. 48.)

International Labour Conference, twelfth session, Geneva, 1929: report of the director. Part 2. *Summary of annual reports under Article 408.* (Geneva: International Labour Office. 1929. Pp. 227.)

Jahresberichte der gewerblichen Berufsgenossenschaften über Unfallverhütung für 1928. Herausgegeben vom Reichsarbeitsministerium. 48. Sonderheft zum Reichsarbeitsblatt. (Berlin: Reimar Hobbing. 1929. Pp. 625.)

The minimum requirement of professional capacity in the case of captains, navigating and engineer officers in charge of watches on board merchant ships: International Labour Conference, thirteenth session, Geneva, 1929. (Geneva: International Labour Office. 1929. Pp. 107.)

The promotion of seamen's welfare in port. International Labour Conference, thirteenth session, Geneva, 1929. (Geneva: International Labour Office. 1929. Pp. 71.)

Railroad hours of service. Statistical analysis of carriers' monthly hours of service reports covering all railroads which reported during year ending June 30, 1928, instances in which employees were on duty for periods other than those provided by federal hours of service act, with comparative summary covering years ending June 30, 1924, 1925, 1926, 1927, and 1928. (Washington: Supt. Docs. 1929. Pp. 55. 10c.)

The regulation of hours of work on board ship. International Labour Conference, thirteenth session, Geneva, 1929. (Geneva: International Labour Office. 1929. Pp. 293.)

Report of the tenth National Conference of Labour Women held at the Pavilion, Buxton, April 23-25, 1929. (London: Labour Party, Transport House, Smith Sq. 1929. Pp. 67. 3d.)

Semi-annual review and bibliography of the age factor in industry. (New York: Industrial Relations Counselors. 1929. Pp. 30.)

Some types of industrial poisoning. (Boston: Consumers' League of Mass., 3 Joy St. 1929. Pp. 44. 15c.)

Trade unions study unemployment. (Washington: Am. Fed. of Labor. 1929. Pp. 167. 35c.)

The American Federation of Labor has in this booklet brought together contributions of thirteen economists to the study of the problem of unemployment. An introduction by William Green expresses the hope that the

volume "may suggest workable measures to those who are looking for constructive solutions."

Although the majority of the articles have been printed elsewhere in amplified form, the present collection is nevertheless a valuable guide for the interested trade unionist and for the student of labor. Of especial significance are the studies by Margaret Scattergood and Mary Gilson of the working of unemployment insurance schemes in the United States. It appears that but 50,000 American workers are protected by such plans. Of this number, 42,000 are unionists. More than 17,000 belong to the Typographical Union. Other articles treat of the measurement of unemployment, its causes, methods used by management to combat the evil, and proposed assistance by governmental agencies. The contributors include Charles O. Hardy, Ewan Clague, Jürgen Kuczynski, Lawrence B. Mann, Merideth B. Givens, Isador Lubin, H. S. Person, Fred Cullum, James S. Taylor, and William M. Leiserson.

It is significant that nowhere in the booklet is a state plan of unemployment insurance sponsored, although Dr. Lubin mentions its possible application to the coal industry. Moreover, little attention is given to wage increases and reductions of hours as possible cures. In the main, the writers plead for unemployment statistics, employment exchanges, stability of prices, far-sighted management, unemployment benefits through trade agreement, and the expansion of public works during depression.

COLSTON E. WARNE

Unemployment: some international aspects, 1920-1928. Report presented to the 12th session of the International Labour Conference, May-June, 1929, Geneva. (London: P. S. King. 1929. Pp. vii, 222. $1.25.)

Wages in the United States in 1928. (New York: National Industrial Conference Board. 1929. Pp. x, 41. $1.00.)

Supplements *Wages in the United States, 1914-1927,* which was published in April, 1928.

The work of the National Child Labor Committee, 1904 to 1929. (New York: National Child Labor Committee, 215-4th Ave. 1929. Pp. 12.)

Money, Prices, Credit, and Banking

Money, Bank Credit and Prices. By LIONEL D. EDIE. (New York: Harper. 1928. Pp. xiv, 500. $3.50.)

In addressing himself to the theory of money, credit and prices, a branch of economics vigorously debated for more than a century, the author disclaims any purpose "to add further controversy where a surfeit of controversy already exists," and he states that his "dominating aim is to extend the positive and constructive analysis of the subject," with the following general lines of approach:

1. A restatement of the pure theory of the value of money in a form which lends itself to quantitative hypothesis, quantitative methods of investigation, and quantitative testing.

2. A breaking down of general concepts of movements and tendencies into standard time series—secular, seasonal, cyclical, irregular—and a description

of the shifting sequences and amplitudes of prices, credit, production, and other factors from phase to phase of the various types of movements.

3. A description of the bank mechanisms of adjustment through which prices and the means of payment act and interact upon each other and upon related factors in the business world.

4. An application of the institutional-genetic mode of treatment and point of view to the major concepts of monetary science.

5. A development of a technique of analysis useful not merely to "explain" price movements of the past, but also to predict, with due allowance for fortuitous events and the hazards of forecasting, the price movements of the future.

6. A critical evaluation of plans of price control and a development of standards of price control suited to achieve greater stability in the price level and the purchasing power of money.

Furthermore, the author has aimed to put the "discussion in thoroughly teachable form at the college level of instruction," and where clarity and precision requires he has not felt it necessary to offer a "juvenile simplification of matters inherently complex and difficult"; he assumes that the reader has at least had a course in elementary economics.

The reviewer has quoted thus extensively from the preface because in few cases has he found a preface which so adequately and accurately describes the book and because he feels in general an author should be permitted to tell what he aims to do.

A book of this order is most timely. Whereas Kinley, Cannon, Johnson, Dunbar, Laughlin, and other authors upon whom we have learned to depend wrote "against a background of greenbackism, bimetallism, and agitation for reform of the National Bank act," Edie writes when the "emphasis (is) upon such factors as the war legacy of inflation and deflation, central bank policy, the position of credit, interest rates, and prices in the business cycle, the use of statistics and index numbers, the gold exchange standard, the international connection of price movements, and the stability of the price level." This basal shift in setting, experience, scope, means, and method of analysis has called loudly for a restatement of the theory of money and credit; this want of recent years is now supplied in a comprehensive and able manner.

The very comprehensiveness of the book makes it difficult for the reviewer to cover at all adequately in the few pages allowed him. In reading it one feels the same pressure of the multiplicity of facts that sought attention from the author and realizes that he, too, was forced to choose. This necessity to select and discard is most evident in the topics of banking; the reviewer regards as serious the omission or minimal treatment of the costs of the deposit system of currency and the allocation of exchange and collection charges, the relation of the stock and bond market to the credit market, both domestic and international,

and the possibility of bank credit expansion of a single bank and of the bank system as a whole upon an increment of reserves.

The author closes each chapter with a summary of his conclusions after the examination made in the chapter; these are usually quite incisive. But a most obvious tendency that in a way characterizes the book is to give all possible indulgence to the contributions of others. (The one notable exception is Professor C. A. Phillips, whose important contribution to bank credit is not mentioned; indeed he is not even named in the bibliographies which are found at the end of the chapters and which indicate a broad reading in monetary literature.) This propensity to indulge sometimes seems like compromise; for instance, on page 190 it is asserted that Fisher's equation of exchange is a truism, but nevertheless Edie regards this truism as of great importance "as a tool of thought and as a tool of statistical investigation. . . . an indispensable instrument of research and reflection in the field of monetary value." Whereas, Fisher holds that in his equation of exchange "the price level is the effect and cannot be the cause of the change in the other factors," Edie time and time again through his book emphasizes the point that M is no more a cause of P than P is a cause of M, that all the factors of the equation of exchange, M, V, M′, V′, P and T, act and interact upon one another, that Fisher's conception of the causal relationships is naively simple as compared with the actual world.

Another characteristic attitude is to question the subliminal faith economists are lately giving to index numbers and the special employments given them. Among other cautions Edie drives home the point (*cf.* 403) that index numbers are or must be framed for a limited purpose, that there is no general purpose index number, and that when used the limitations of an index number should be kept well in mind. For instance, in the stabilization program, having first determined what is to be stabilized, one may proceed to compute an index which measures that item, be it wholesale prices, the cost of living, industrial output, or what not. Cautions of this order delimit the possibilities of stabilization programs.

A review of the book should surely mention another thesis which Edie has examined more comprehensively in his earlier book on *Gold Production* and to which he has given much publicity in speeches and the economic journals, namely, that the prospective increase in the monetary gold supply will not suffice to maintain the existing price level. This forecast is the result of an examination of the factors affecting gold production and the uses of gold and gold substitutes in the arts and for monetary purposes. He makes a comprehensive survey of the methods "of forecasting cyclical and secular changes in the price level," and,

using those which lend themselves to quantitative statistical method, forecasts a secular decline in prices in the immediate future.

The book is quite free from typographical errors, the few noticed being Irving *G.* Fisher (p. 189), the ***Ricardo Bullion Report*** dated *1910*, (p. 289), an *acuate* dilemma, (p. 338), and reserve *rations*, (p. 431). The first few chapters seem very awkward. Some tables lack titles and do not indicate the sources of data. But these defects are mere trifles in an exceptionally good book.

Ray B. Westerfield

Yale University

Select Statutes, Documents and Reports relating to British Banking, 1832-1928. By T. E. Gregory. Vols. I and II. (London: Oxford Univ. Press. 1929. Pp. lx, 147; vii, 391. $7.50.)

This book comes to remind us that certain of our present day economic experiments have been tried before. Dr. Gregory has made a careful selection of the documents relating to the determination of policy of the Bank of England for the years from 1832 to date, together with some selections relating to the development of joint stock banks. He has prefaced this with an introduction of sixty pages reviewing concisely the events of the period in the field of banking policy.

A considerable part of the two volumes is taken up by quotations from testimony given by officials of the Bank of England and others before select committees inquiring into the policy of the bank in much the same way as such committees inquired into the behavior of the federal reserve system in 1921 and 1926. Some of the testimony reads much like certain of the testimony before our own Congress. For example the statement by Samuel Jones Lloyd before the Select Committee of the House of Commons on Banks of Issue in 1840 contains the following:

(Question)

Do you apprehend that it is possible for a steady rate of interest to be preserved in this country?

(Answer)

No. I conceive it to be quite impossible; in a country like this, with a highly accumulated capital, with great enterprise, with a great spirit of speculation, with very extensive commercial relations with all parts of the world, and of a highly manufacturing character also, it appears to me impossible to avoid considerable oscillations in the rate of interest. (Par. 2796, page 44, vol. I.)

The main interest of these two volumes lies in the development they trace in central bank policy, particularly as related to the question which still concerns us closely whether the policy of banks of issue should be in almost automatic response to the movements of their re-

serves or whether it should be somewhat independent of these movements of reserves. The extreme recent development of the latter position is found in the theories of those advocating a so-called "managed currency."

Prior to the passage of the Peel act in 1844 we find the testimony of banking officials generally favorable to a fixed relationship between the amount of bullion held by the bank and its issue of currency; we also find a considerable faith in the belief that an automatic administration of the gold standard would prove the best solution of central bank policy. This principle was embodied in the Peel act of 1844. But in July, 1848, a secret committee of the House of Lords on the Commercial Distress reported:

> But an attempt to enforce by law under all circumstances one fixed and inflexible rule for the management of a national bank of issue seems inconsistent with the best written authorities, with the general principles of economic science, as well as with the testimony of many witnesses of practical knowledge and experience. (Page 37, vol. II.)

The time and manner of departing from automatic adherence to the reserve position, and hence departure from the spirit of the Peel act was the subject of discussion for many years ensuing. Particularly interesting was the testimony of William Newmarch before a select committee in June, 1857, whose testimony was a forecast of the thesis of Walter Bagehot in *Lombard Street.*

The sections recording the development of joint stock banking have applications to the present. A secret committee of 1836 appointed by the House of Commons reports:

> The Evidence taken before Your Committee and the Returns from the Stamp Office establish the fact, that these Banks are rapidly extending in all directions; that new Companies are daily forming, and that an increased number of Branches and Agencies are spreading throughout England, even in small Towns and Villages—that a principle of competition exists which leads to the extinction of all Private banks, and to their conversion into Banking Companies. The mode in which this is effected, and the principle on which the issue of transferable shares acts at once on Private Banks, and generally on commercial credit, is fully developed in the Evidence. (Page 221, vol. II.)

These volumes of Professor Gregory's are not only a fine source for the study of the development of British banking, but contain much that bears upon our own problems.

W. Randolph Burgess

New York City

NEW BOOKS

ANDERSON, B. M. *The effect on Europe of tight money in America.* Chase Econ. Bull., vol. IX, no. 4. (New York: Chase National Bank of N.Y. 1929. Pp. 18.)

BLOCKER, J. G. *The guaranty of state bank deposits.* Kansas studies in business no. 11. (Lawrence: Univ. of Kansas. 1929. Pp. 58. 50c.)

BROWN, W. A. *England and the new gold standard, 1919-1926.* (New Haven: Yale Univ. Press. 1929. Pp. 316. $4.)

EDIE, L. D. *Capital, the money market and gold.* (Chicago: School of Commerce and Admin., Univ. of Chicago. 1929. Pp. ix, 53. 50c.)

EINZIG, P. *International gold movements.* (New York: Macmillan. 1929. Pp. 122. $2.40.)

FENNELL, C. H. H. *A practical examination of the Bills of Exchange acts.* (New York: Pitman. 1929. Pp. xvi, 152. $2.25.)

GOLDSCHMIDT, R. W. *Das deutsche Grossbankkapital in seiner neueren Entwicklung.* (Berlin: Emil Ebering. 1928. Pp. viii, 255. R.M. 6.)

This book represents the major part of a doctoral thesis on the recent development of the capital structure of the German "big banks." The policy of the German banks in the war and later in the inflation and deflation period was put to severe tests; and the author by reviewing their policy towards the government, the industry, the capital and money market, the stock exchange and foreign trade, to quote only some of their fields of endeavor gives a much broader picture of German banking than the narrow title of his thesis may indicate. The fact, however, that the protection and proper use of their capital was, of course, their prime task, justifies the method of reviewing recent German banking policies from this point of view.

A survey of the German banking organization in 1926 reveals that, in spite of the continued acquisition process, the "big banks" control only 5 per cent of the offices compared with 23 per cent for the smaller banks, 19 per cent for the savings banks and 53 per cent for the coöperative credit associations; the total number of offices amounted to 32,490. A comparison according to capital resources, number of employees or amount of business done would reveal quite different proportions, however.

ROBERT M. WEIDENHAMMER

HARRIS, S. E. *The assignats.* Harvard econ. studies 34. (Cambridge: Harvard Univ. Press. Pp. About 300.)

HOGGSON, N. F. *Epochs in American banking.* (New York: John Day Co. 1929. Pp. 255. $5.)

HOUGH, P. V., editor. *Opinions of importance: a compilation of opinions from individuals, organizations and publications of authority, on the necessity of the Uniform Small Loan law.* (Harrisburg, Pa.: American Industrial Lenders Assoc., 10 S. Market Sq. 1929. Pp. 364.)

KNIFFIN, W. H. *American banking practice.* New 2nd ed. (New York: McGraw-Hill. 1929. Pp. 393. $3.50.)

LAWRENCE, J. S. *Wall Street and Washington.* (Princeton: Princeton Univ. Press. 1929. Pp. xx, 468. $5.)

MARTIN, P. W. *Unemployment and purchasing power.* (London: P. S. King. 1929. Pp. vii, 85. 4s. 6d.)

This little book purports to state briefly the main arguments and findings of a more detailed study on the relation between unemployment,

purchasing power and monetary policy which is at present in course of preparation. The author contends that the doctrine of the classical economists that it was impossible to have an over-production in general, which in his opinion runs definitely counter to experience, has largely been responsible for overlooking the most essential cause of unemployment and the failure to apply necessary remedies. Adequate employment, runs the thesis of the essay, depends upon adequate demand being sustained, and and adequate demand depends in turn upon adequate purchasing power. The essential question is whether purchasing power is being maintained and what steps can be taken to maintain it.

With definite application to the unemployment problem in Great Britain, a long and laborious calculation is employed to show that the business depression in 1920-1921 was a direct result of the "short-circuiting of purchasing power" created by a huge increase in working capital necessary to give employment to some 3½ million men who were demobilized from the military forces of the nation. The short period of prosperity in 1919-1920 was caused only by the fact that there was a huge influx of purchasing power from outside sources—the government printing presses and the banks—tending to make for a superabundance of purchasing power. This influx was, however, of short duration. Since 1921 there has been no new influx of purchasing power, and unemployment has persisted because the fear of inflation has prevented a "proper" adjustment of monetary policy to provide an increase in purchasing power. The constant decline in the total amount of bank notes and treasury notes in circulation between 1920-1926 has been largely responsible, the author contends, for the shortage of purchasing power and unemployment in the past six years.

The mechanism for increasing the purchasing power of the nation he finds in the monetary legislation of 1928, which gives the Bank of England power to increase the fiduciary note issue considerably to avert an "undue stringency" in purchasing power. The specific remedy he finds in the "special financing of public works," not out of taxes, but out of loans by the government from the banks.

Nearly 40 pages of this 85 page essay are devoted to diagrammatic presentation and explanation of how purchasing power is short-circuited and how the deficiency can be overcome by additions from outside sources, the latter being primarily monetary issues.

William Haber

Miller, H. F. R. *The foreign exchange markets: a practical treatise on post-war foreign exchange.* 2nd ed. (New York: Longmans Green. 1929. Pp. 159. $3.40.)

Robertson, D. H. *Money.* New ed. (New York: Harcourt Brace. 1929. Pp. 216. $1.25.)

Shelton, W. A. *The weekly wholesale price index of the National Fertilizer Association.* (Washington: National Fertilizer Assoc., 616 Investment Bldg. 1929. Pp. 47.)

Swoboda, O. *Die Arbitrage in Wertpapieren, Wechseln, Münzen und Edelmetallen: Handbuch des Börsen, Münz, und Geldwesens sämtlicher Handelsplätze der Welt.* 17th ed. Edited by E. Wagon. (Berlin and Leipzig: Haude & Spener. 1928. Pp. xx, 785.)

Wood, H. *The coinage of the Mexican revolutionists.* Numismatic notes and monographs, no. 38. (New York: American Numismatic Society. 1928. Pp. 53.)

Digest of rulings of the Federal Reserve Board, 1914-1927, inclusive. (Washington: Supt. Docs. 1928. Pp. xvi, 774.)

National Economic Bank of Warsaw: report of directors for the financial year 1928. (New York: American Polish Chamber of Commerce & Industry in U. S., 953-3rd Ave. 1929. Pp. 69.)

Public Finance, Taxation, and Tariff

New Books

Baldwin, W. E., editor. *New York banking law, annotated: containing all amendments to January, 1930, with annotations from decisions of the courts, rulings of the attorney general and an appendix containing general provisions relating to banking law.* (New York: Banks Law Pub. Co. 1929.)

Barton, W. E., and Browning, C. W. *Federal income and estate tax laws, correlated and annotated, being a compilation and annotation of all federal income and estate tax laws since 1909 and a correlation of the Revenue acts of 1917, 1918, 1921, 1924, 1926 and 1928.* 4th ed. (Washington: J. Byrne & Co. 1929. Pp. xiv, 766.)

Berglund, A. and Wright, P. G. *The tariff on iron and steel.* (Washington: Brookings Inst. 1929. Pp. xvii, 240. $3.)

Brigden, J. B., and others. *The Australian tariff: an economic enquiry.* Econ. ser. no. 6. (Melbourne: Melbourne Univ. Press. New York: Macmillan. 1929. Pp. xvii, 232.)

Cannan, E. *The history of local rates in England.* 2nd ed., enl. (London: P. S. King. 1929. 6s.)

Crossen, E. P. *Taxation and public finance in South Dakota.* Bull. 232. S. D. Agric. Exp. Station coöperating with U. S. Bureau of Agric. Econ. (Washington: Supt. Docs. 1928. Pp. 76.)

Fitzpatrick, J. T., editor. *Tax law of the state of New York, being l. 1909, chap. 62, entitled "An act in relation to taxation, constituting chapter sixty of the consolidated laws" with all amendments to the end of the legislative session of 1929.* (New York: Baker Voorhis. Albany: M. Bender. 1929. Pp. 409.)

Gerloff, W. and Meisel, F. *Handbuch der Finanzwissenschaft.* Band III, Lieferung 4-10. (Tübingen: Mohr. 1928, 1929. Pp. 161-208; 209-256; 257-304; 305-352; 353-400; 401-448; 449-520.)

Griziotti, B. *Principii di politica diritto e scienza delle finanze.* (Padua: A. Milani. 1929. Pp. 324. L.40.)

Handy, A. *Inheritance and other like taxes: a treatise on death taxes.* (New York: Prentice-Hall. 1929. Pp. xxxviii, 492.)

Heidrich, P. *Die Lehre von den obersten Steuerprinzipien: ein Beitrag zur Theorie der öffentlichen Wirtschaft.* Abhandlungen des wirtschaftswissenschaftlichen Seminars zu Jena, Band XX, Heft 3. (Jena: Fischer. 1929. Rmk. 5.)

Kessler, L. *Uber das Wesen der Verkehrsbesteuerung.* Abhandlungen des wirtschaftswissenschaftlichen Seminars zu Jena, Band XX, Heft 2. (Jena: Fischer. 1929. Rmk. 6.50.)

McLaren, N. L. and Butler, V. K., Jr. *California tax laws of 1929.* (San Francisco: Walker's Manual, Inc. 1929. Pp. 376.)

Magill, R. F. *Cases on taxation.* (New York: Ad Press. 1929. Pp. 251.)

Rea, L. O. *The financial history of Baltimore, 1900-1926.* Studies in hist. and pol. sci., ser. XLVII, no. 3. (Baltimore: John Hopkins Press. 1929. Pp. 127.)

Brings down to date the monographic study earlier made by Professor Hollander which covered the period 1729 to 1897. The study is fully documented with notes.

Ropke, W. *Finanzwissenschaft.* (Berlin: Spaeth & Linde. 1929. Pp. 149. R. M. 7.50.)

Rottschaefer, H. *Selected cases on the law of taxation.* (Chicago: Callaghan & Co. 1929. Pp. xviii, 601.)

Soper, W. W. *Legal limitations on the rights and powers of school boards with respect to taxation.* Contribs. to education no. 349. (New York: Columbia Univ. Teachers Coll. 1929. Pp. vi, 124.)

Per capita costs in city schools, 1927-28. Educ. Bureau stat. circ. 12. (Washington: Supt. Docs. 1929. Pp. 11. 5c.)

Combined statement of receipts and expenditures, balances, etc., of United States for fiscal year ended June 30, 1928. (Washington: Supt. Docs. 1929. Pp. 412. $1.)

Consolidated United States income tax laws. 1929 supplement, with regulations and digest of court and board of tax appeals decisions and unofficial rulings. (Chicago and New York: Commerce Clearing House. 1929. Pp. 2356.)

Customs regulations of United States, prescribed for instruction and guidance of customs officers. Ed. of 1923. (Washington: Supt. Docs. 1929. Pp. 792. $1.50.)

Historical survey of the debts of the state of Mississippi repudiated before the Civil War. Extracted from the 54th annual report of the Council of Foreign Bondholders, followed by a supplementary survey extracted from the 55th annual report. (London: Council of Foreign Bondholders, 17 Moorgate. 1929. Pp. 32.)

Nebraska taxpayers' handbook. Bull. no. 15. (Lincoln: Nebraska Legislative Reference Bureau. 1928. Pp. 46.)

Salaries and salary trends of teachers in rural schools. Education Bureau bull. no. 6. (Washington: Supt. Docs. 1929. Pp. 54. 10c.)

Statistics of municipal finances for city and town fiscal years ending between November 30, 1927, and March 31, 1928: twenty-second annual report of the Commonwealth of Massachusetts. Public doc. no. 79. (Boston: Dept. of Corp. and Taxation, State House. 1929. Pp. xxvii, 299.)

Studies in taxation. North Carolina Club yearbook, 1927-28. Ext. bull. vol. VIII, no. 8. (Chapel Hill: Univ. of N. C. Press. 1928. Pp. 131.)

The North Carolina Club resembles the famous Cobden Club in many respects. One point of likeness is the publication of the papers presented at regular meetings; another, the general excellence of the addresses; and a third, the high caliber and diversified character of its membership. The present volume is the work of the Club for 1927-1928 and constitutes the twelfth yearbook.

The nine essays vary widely in their usefulness for the general tax student. The first on the "Historical Background of the Tax Question," by Mr. Robert B. House appears to be the random thoughts of a trained but non-technical mind, while the one on the "Taxing of Intangible Personal Property," by Professor A. S. Keister and that on "Inheritance and Estate

Taxes," by Professor C. O. Spruill are the results of careful research.[1] The six other papers fall between these two extremes. That by Professor Clarence Heer on the "Rural Tax Problem" assigns responsibility for high rural tax burdens to the scattered character of the agricultural property and the fact that many of the types of business patronized by the farmer are located and taxable in cities. Thus not all agricultural business can be taxed by the rural community. On the other hand, he shows that, to secure the same service where that is possible at all, the rural governmental agency must spend more than the urban, owing to the necessity of small scale operations. He suggests that a solution may be found through centralization and through the combination of local governmental units. Professor S. M. Derrick, in the essay on "Consumption Excise Taxes for State Purposes," concerns himself with the very interesting development of such excises since 1919. Though he makes references to gasoline taxation, the essay is devoted primarily to an analysis of the tendency from 1921 to 1927 to impose special taxes on tobacco, soft drinks, admissions to amusements and other non-essential commodities and services. It is carefully written, suggestive, and reasonably complete. The author ignores certain taxes of the class he is discussing, as, for example, those on admissions to prize fights. He also overlooks the repeal of the Louisiana tobacco tax in asserting (p. 118) that "Connecticut seems to be the only state to have withdrawn from the field (of special state consumption excises) after having once entered it." The writer offers a careful, though frankly biased, analysis of advantages and disadvantages of such excises and reaches the orthodox conclusion that, while inappropriate as a principal source of revenue, they are unobjectionable as a means of raising a small proportion of the state income.

The general scope of the remaining papers may be roughly indicated by their titles: "The Property Tax Problem," by Ralph C. Hon; "Assessment of Rural Real Estate," by James M. Mitchell; "Interstate Comparison of the Tax Burden on Cotton Mills," by Hershal L. Macon; and "Some Aspects of Municipal Finance in North Carolina," by Ina V. Young. All these, like those already mentioned, are written with North Carolina conditions clearly in mind; and, so far as possible, all illustrations are drawn from North Carolina experiences.

James W. Martin

A survey of bank taxation in the United States, containing a tabulation in parallel columns of the bank tax systems of all the states and of the District of Columbia. 3rd ed. (New York: American Bankers Assoc. Committee on Taxation. 1929. Pp. 23.)

Tax law of the state of New York: provisions of the tax law of the state of New York relating to local assessments. (New York: Baker Voorhis. Albany: M. Bender. 1929. Pp. 146.)

[1] The two latter are reprinted from the *Report of the Tax Commission* reviewed in the June, 1929, American Economic Review (pp. 323-325). All the other papers are published for the first time in the year book.

Population and Migration

New Books

Batocki, and Schack, G. ***Bevölkerung und Wirtschaft in Ostpreussen. Untersuchungen über die Zusammenhänge zwischen Bevölkerungsentwicklung und Erwerbsgelegenheit.*** (Jena: Fischer. 1929. Rmk. 9.50.)

Crawley, E. ***Studies of savages and sex.*** (New York: Dutton. 1929. Pp. ix, 300. $4.50.)

Gliksman, G. ***L'aspect économique de la question juive en Pologne.*** (Paris: Editions Rieder, 7 Place Saint-Sulpice. 1929. Pp. xxi, 196. 25 fr.)

Groves, E. R. and Ogburn, W. R. ***American marriages and family relationships.*** (New York: Holt. 1928. Pp. xiii, 497. $4.50.)

Heberle, R. ***Über die Mobilität der Bevölkerung in den Vereinigten Staaten von Amerika.*** (Jena: Fischer. 1929. Rmk. 11.)

Linfield, H. S. ***The Jews in the United States, 1927: a study of their number and distribution.*** (New York: Am. Jewish Committee, 171 Madison Ave. Pp. 107.)

Mombert, P. ***Bevölkerungslehre. Grundrisse zum Studium der Nationalökonomie,*** Band XV. (Jena: Fischer. 1929. Pp. iv, 490. Rmk. 20.)

Montejo, J. A. ***La emigración española a Francia.*** Pub. no. 9. (Madrid: Sociedad para el Progreso Social. 1929. Pp. 13.)

Rosenberger, J. L. ***In Pennsylvania-German land, 1928-29.*** (Chicago: Univ. of Chicago Press. 1929. Pp. 103. $1.50.)

Seymour, F. W. ***The story of the Red Man.*** (New York: Longmans Green. 1929. Pp. xi, 421. $5.)

Taylor, P. S. ***Mexican labor in the United States migration statistics.*** Univ. of Calif. pubs. in econ., vol. VI, no. 3. (Berkeley: Univ. of California Press. 1929. Pp. 237-255.)

The third study in a series on Mexican labor in the United States, for which a grant was made by the Social Science Research Council. This contribution "is not concerned with questions of policy involved in the main issue; its purpose is the more limited one of analyzing the statistical data, pointing out their misuses, and indicating, irrespective of current political controversy, of what use they are. It is also to be hoped that observations made herein will make clear the necessity of revising the statistical rules of the United States Immigration Service if the statistics published are ever to admit of a clear-cut interpretation of the nature and extent of an overland migration which they profess to record."

Villard, O. G., and others. ***The influence of immigration on American culture.*** (New York: Conference on Immigration Policy, 122 E. 42nd St. 1929. Pp. 41.)

Aperçu de la démographie des divers pays du monde. Publié par l'Office Permanent de l'Institut International de Statistique. I. ***Etat de la population.*** II. ***Mouvement de la population.*** (The Hague: Soc. Anonyme Ancienne Librairie. 1929. Pp. xvii, 447.)

Birth, stillbirth, and infant mortality statistics. 1925. Part II. (Washington: Supt. Docs. 1929. Pp. 76. 15c.)

Birth, stillbirth, and infant mortality statistics for birth registration area of United States, 1926, 12th annual report. Part I. ***Summary and rate tables and general tables.*** (Washington: Supt. Docs. 1929. Pp. 253. 60c.)

External migration of the Dominion of New Zealand for the year 1928: statistical report. (Wellington: Census and Statistics Office. 1929. Pp. xii, 26. 2s.)

Marriage and divorce, 1927, statistics. 6th annual report. (Washington: Supt. Docs. 1929. Pp. 90. 15c.)

Mortality statistics, 1926, 27th annual report. Part I. *Summary and rate tables and general tables for death registration area in continental United States, with supplemental statistics for Hawaii and Virgin Islands.* (Washington: Supt. Docs. 1929. Pp. iii, 430. $2.)

Problems of the immigration service. (Washington: Supt. Docs. 1929. Pp. 30.)

Recensement général de la population au 28 octobre, 1927: République Turque. Fasicule II. *Résultants détaillés pour les vilayets.* (Angora: Office Central de Statistique. 1929. Pp. 208.)

Statistical report of infant mortality for 1928 in 729 cities of the United States. (New York: Amer. Child Health Assoc. 1929. Pp. 27.)

Social Problems and Reforms

How to Abolish the Slums. By E. D. Simon. (London: Longmans Green. 1929. Pp. xii, 146. 4s. 2d.)

The importance of adequate housing for the less fortunate economic classes is universally recognized, but there is little agreement as to how it shall be accomplished. This recent volume by the ex-Lord Mayor of Manchester, a former chairman of the Manchester Housing Committee, offers a timely account of the slum problem in British cities. In spite of the self-satisfied boast that England has built over a million houses since the war, it is pointed out that the housing problem is on the verge of being solved for the clerk and artisan only, but for the poorer workers little or nothing has been done; the condition of the slums in which they live is said to be worse today than it was before the war.

The author surveys the present position of English housing, considers the degree of overcrowding, and the relative inability of a large proportion of the slum dwellers to pay an economic rent. With reference to the much-mooted question of reconditioning houses in slum areas, Mr. Simon cites the herculean achievement of Manchester in doing away with 10,000 back-to-back houses by tearing down obstructive houses, opening up courts, abolishing privy-middens and the like, so that the really bad slum does not exist in Manchester. Some 27,000 Manchester houses are below a reasonable standard of fitness for human habitation, and this figure includes a large proportion of the reconditioned houses. Nevertheless, the author asserts that slums in many English towns are so bad that, having regard to the inevitable delay in building an adequate supply of new houses, reconditioning is justifiable as a temporary and partial remedy. The only effective way of dealing with the slums is to

demolish them, and this is not practicable until adequate accommodation has been provided at rents which the slum dweller can pay and so located that he may have access to his work without excessive expense.

Constructively Mr. Simon thinks the slum problem can be mitigated by a definite building program over the next twenty years or so, embracing a large proportion of working-class houses which will relieve the pressure on the slums. The problem, however, cannot be solved except through lower rents made possible by means of increased subsidies. The subsidy idea is justified in this wise:

> Frankly, this outcry against the principle of subsidies is all nonsense. The country has long since made up its mind that the needs of the children must be satisfied. Even when wages are fairly good there are many things which the father cannot provide or pay for. The state therefore intervenes and gives effective help in education, in public health or unemployment. . . . . There remains the one great field where help is necessary if the child is to have a fair chance in life: Housing. Every argument which applies to the other cases applies with equal force to housing. It is false economy to spend ten pounds a year in educating a child, and then let it grow up in a damp dark house, horribly overcrowded, with nowhere to play; in so wretched a state of health that it cannot get the full benefit of its education.

The existing slum clearance subsidy is criticized as an ineffective and bad form of subsidy, nor is the special subsidy, given in some places to former slum dwellers, satisfactory, for residence in a slum area does not prove evidence of need. The author's proposal is that the additional subsidy for slum dwellers be based, not on the type of the house, but on the needs of the family which will be determined by two factors—family income and number of children.

Irrespective of whether one is inclined to agree with Mr. Simon's proposed means of abolishing the slum, it must be admitted that the book is well written, clear and concise, and offers much of value to the student of housing in American cities.

E. E. Muntz

New York University

New Books

Batten, E. *Nationalism, politics and economics.* (London: P. S. King. 1929. Pp. x, 145. 7s. 6d.)

Boole, Mrs. E. A. *Give prohibition its chance.* (New York: Revell. 1929. Pp. 190. $1.50.)

Bowen, E. *Social economy: a text in problems of American democracy.* (New York: Silver Burdett. 1929. Pp. viii, 572. $1.80.)

The subtitle of this book offers a clew to the unifying principle underlying this recent high school text. Professor Bowen has sought to combine materials usually thought of as belonging to the several "fields" of economics, political science and sociology to organize a broad survey course

in citizenship. After two short introductory chapters, the body of the work is divided into three parts: of these, the first two seek to describe respectively the basic character of American governmental organization and the nature of the modern production system. The final division, under the broad heading "Immediate American problems," considers a series of public questions in which the emphasis is now economic, now sociological. Brief chapters on such topics as the family, law and crime, conservation, business and government, public finance, the tariff, follow each other in a somewhat unusual succession, concluding with chapters on "Expansion" and "Peace and war."

Despite the wide range of this subject matter and the necessity of finding a level of exposition suited to the secondary school student, the author has succeeded in including a surprising amount of factual and descriptive detail. The style is simple and easy and the illustrative matter concrete and homely, sometimes perhaps to the extreme. Effective use has been made of italicized leading sentences, and each chapter is concluded with four or five pages of teaching helps in the form of questions, collateral reading assignments and discussion topics. *Social Economy* is presented as the product of several years of classroom experiment; and it is apparent that great pains have been taken to render a difficult subject matter manageable to the high school teacher and class.

The limitations of the book are largely the limitations imposed by its purpose. The brief treatment accorded difficult and frequently controversial issues has evidently occasioned oversimplification in the statement of principles and omission of the basic considerations upon which conclusions should rest. The result is a certain appearance of positivism in statements where carefully qualified judgments would be more in order. This is especially noticeable where the author's judgment is one not at all universally accepted. To cite but a single instance, "The Federal Trade Commission act of 1914 was simply a first step in applying the principle of regulation to industries in which the force of competition was dying..... It is quite true that the Federal Trade Commission was given only the power to investigate and eliminate unfair competition, whereas *the need was for a force to take the place of competition*." (P. 428-9.)

But perhaps the real question here raised is as to the possibility of training high school seniors to appreciate the intricacy of causation and uncertainty of conclusion characteristic of so many politico-economic issues. That question is scarely pertinent here. Professor Bowen has not only written a very teachable volume; he has made a very interesting selection of subject matter, which should stimulate the attempt to give the graduating high school student, too frequently finishing his formal education, a better appreciation of the kind of social and economic organization of which he is a part.

H. L. Caverly

Bradway, J. S., editor. *Law and social welfare: a preliminary study of the inter-relationship between these two fields of human activity, with a monograph on the possible extension of the human life cycle.* Annals, vol. CXLV, no. 234. (Philadelphia: American Acad. of Pol. and Social Science. 1929. Pp. xiii, 220. $2.)

Bradway, J. S. *Law and social work: an introduction to the study of the*

legal-social field for social workers. (Chicago: Univ. of Chicago Press. 1929. Pp. xx, 189.)

Cleveland, F. A. *Modern scientific knowledge of nature, man and society.* (New York: Ronald. 1929. Pp. xvii, 592. $4.50.)

Cobb, S. H. *Theory of prohibition.* Reprinted from the *Princeton Review,* July, 1887. (Washington: Assoc. against the Prohibition Amendment, National Press Bldg. Pp. 10.)

Counts, G. S. *Secondary education and industrialism.* The Inglis lecture, 1929. (Cambridge: Harvard Univ. Press. 1929. Pp. 70. $1.)

Dawson, C. A. and Gettys, W. E. *An introduction to sociology.* (New York: Ronald. 1929. Pp. vi, 866. $4.50.)

Davis, J., editor. *Labor speaks for itself on religion: a symposium of labor leaders throughout the world.* (New York: Macmillan. 1929. Pp. 265. $2.)

Donovan, F. R. *The saleslady.* (Chicago: Univ. of Chicago Press. 1929. Pp. 278. $3.)

Ellwood, C. A. *Man's social destiny in the light of science.* Cole lectures for 1929, Vanderbilt Univ. (Nashville, Tenn.: Cokesbury Press. 1929. Pp. 219. $2.)

Grunsky, C. E. *Ways to national prosperity and other essays, addresses and reports on economics and related subjects.* (New York: Walter Neale. 1929. Pp. 165. $2.)

Hampe, T. *Crime and punishment in Germany, as illustrated by the Nuremberg malefactors' books.* Translated by Malcolm Letts. (New York: Dutton. 1929. Pp. viii, 175. $3.)

Hawkes, E. W. and Johns, R. L. *Orientation for college freshmen: adaptation to college life, vocations, and citizenship.* (New York: Ronald. 1929. Pp. viii, 310. $3.)

Hertzler, J. O. *Social institutions.* (New York: McGraw-Hill. 1929. Pp. x, 234. $2.50.)

Hubbard, T. K. and McNamara, K. *Planning information up-to-date: a supplement, 1923-1928, to Kimball's Manual of information on city planning and zoning, including references on regional, rural and national planning.* (Cambridge: Harvard Univ. Press. 1928. Pp. viii, 103.)

Hughes, E. A. and Stuenkel, F. *The social service exchange in Chicago.* (Chicago: Univ. of Chicago Press. 1929. Pp. xiii, 115.)

Johns, R. L. *State and local administration of school transportation.* Contribs. to educ. no. 330. (New York: Columbia Univ. Teachers Coll. 1928. Pp. ix, 134.)

Jones, T. J. *Essentials of civilization: a study in social values.* (New York: Holt. 1929. Pp. xxvii, 267. $2.50.)

This volume is one of the American social science series, published under the editorship of Howard W. Odum. Its author is educational director of the Phelps-Stokes Fund, and his discussion profits by his wide practical experience and extended travels. It is interesting and much better written than the majority of textbooks with which it is associated.

Dr. Jones maintains that all civilizations, primitive as well as advanced, are built around the same essentials, which satisfy universal and constant desires and needs. In their elemental form these essentials are health and sanitation, appreciation and use of environment, the conservation of

the heritage through the home, and physical, mental, and spiritual recreation and re-creation.

After discussing the general aspects of these essentials of civilization, Dr. Jones takes up, in a series of chapters, their relations to government, economic, educational, religious, philanthropic, and art organizations. The chapter on economic organization discusses the economic strife which exists, changes in economic control, and the contributions which capital and labor can make to each of the four essentials. Dr. Jones' point of view is indicated by his statement that "The contributions of economic organizations are evidently far beyond the prevailing policies of both capital and labor. However, we have seen that the ideals of such leaders as the labor premier of Great Britain and Owen D. Young, the distinguished American financier, are pointing towards the demands of human welfare."

MAURICE G. SMITH

JOSEPH, B. *Nationality: its nature and problems.* (London: Allen & Unwin. 1929. Pp. 380. 10s. 6d.)

KING, C. L., and others. *Our community life.* 2nd ed., with N. Y. state supplement. (Philadelphia: Winston. 1929. Pp. 706. $1.60.)

LEWIS, H. M. *Physical conditions and public services.* Regional survey, vol. VIII. (New York: Regional Plan of N. Y. and Its Environs. 1929. Pp. 209.)

LOGAN, E. B. *Lobbying.* Annals, suppl. to vol. CXLIV. (Philadelphia: American Acad. of Pol. and Social Science. 1929. Pp. 91.)

LOWIE, R. H. *Are we civilized? Human culture in perspective.* (New York: Harcourt Brace. 1929. Pp. 319. $3.)

ODUM, H. W. and JOCHER, K. *An introduction to social research.* (New York. Holt. 1929. Pp. xiv, 488. $4.)

PATTERSON, S. H. *Social aspects of industry.* (New York: McGraw-Hill. 1929. Pp. xii, 539. $3.)

POSADA, C. G. *La previsión familiar.* Pub. no. 10. (Madrid: Sociedad para el Progeso Social. 1929. Pp. 16. 1 pta.)

SAIT, E. M. *Democracy.* (New York: Century. 1929. Pp. vii, 108. $1.50.)

SCHMIDT, G. A. *Efficiency in vocational education in agriculture.* (New York: Century. 1928. Pp. 330. $2.25.)

SHIDELER, E. H. *Group life and social problems.* (New York: Holt. 1929. Pp. viii, 467.)

SOROKIN, P. A. and ZIMMERMAN, C. C. *Principles of rural-urban sociology.* (New York: Holt. 1929. Pp. 667. $4.50; students' ed. $3.60.)

SPALDING, H. S., editor. *Social problems and agencies: a textbook for students in social science courses.* New and enl. ed. (New York: Benziger Bros. 1929. Pp. xxii, 590.)

STERNBERG, F. *Der Imperialismus and seine Kritiker.* (Berlin: Soziologische Verlagsanstalt. 1929. Pp. 232. R.M.7.50.)

STODDARD, C. F. and WOODS, A. *Fifteen years of the drink question in Massachusetts.* (Boston: Scientific Temperance Federation, 400 Boylston St. 1929. $1.)

STRUCK, F. T. *Methods and teaching problems in industrial education.* (New York: Wiley. London: Chapman & Hall. 1929. Pp. xi, 214. $2.75.)

Thomas, D. S., and others. *Some new techniques for studying social behavior.* (New York: Teachers Coll., Columbia Univ. 1929. Pp. 213. $2.)

Vaughan, D. M. *Buyers and makers: an introduction to social economics.* (New York: Longmans Green. 1929. Pp. 141. 80c.)

Zimmerman, C. C. *Incomes and expenditures of village and town families in Minnesota.* Minn. bull. 253. (St. Paul: Univ. Farm, Univ. of Minnesota. 1929. Pp. 47.)

Canada liquor crossing the border. (Washington: Assoc. against the Prohibition Amendment, National Press Bldg. 1929. Pp. 28.)

The child, the family, and the court: study of administration of justice in the field of domestic relations. Part I. *General findings and recommendations.* Children's Bureau pub. 193. (Washington: Supt. Docs. 1929. Pp. 87. 15c.)

Commonwealth of Massachusetts: annual report of the Department of Public Welfare for the year ending November 30, 1928. Pub. doc. no. 17. (Boston: State House. 1929. Pp. 147.)

Community chests: a selected bibliography. 2nd rev. ed. Bull. no. 95. (New York: Russell Sage Foundation Library. 1929. Pp. 4. 10c.)

Government liquor control in Canada. (Washington: Assoc. against the Prohibition Amendment. 1929. Pp. 44.)

Illiteracy in the several countries of the world. Educ. bull. no. 4. (Washington: Supt. Docs. 1929. Pp. 68. 15c.)

Present day causes of international friction and their elimination. Annals, vol. CXLIV, no. 233. (Philadelphia: American Acad. of Pol. and Social Science. 1929. Pp. 167.)

Report of First Triennial Congress held at Cambridge (England) July, 1928, on the subject of fundamental relationships between all sections of the industrial community. Section II. Containing the Cambridge proceedings. (The Hague: Internat. Industrial Relations Assoc., Javastraat 66. 1929. Pp. 417.)

Los seguros sociales y la institución de la familia: contestación de la sección española a la encuesta de la asociación internacional para el progreso social. Pub. no. 11. (Madrid: Sociedad para el Progreso Social. 1929. Pp. 44. 1.50 ptas.)

Statistics concerning intoxicating liquors. (Washington: Supt. Docs. 1929. Pp. 57. 10c.)

What about the year 2000? An economic summary of answers to the vital questions: Will our land area in the United States meet the demands of our future population? How are we to determine the best use of our land resources? (Washington: Joint Committee on Bases of Sound Land Policy organized by the Federated Societies on Planning and Parks. 1929. Pp. xv, 168. $1.)

Insurance and Pensions

New Books

Baldwin, W. E. and Dirkes, E. H., editors. *New York insurance law,* 1929 ed. *Containing all amendments to January, 1930, with an appendix containing miscellaneous laws affecting insurance.* (New York: Banks Law Pub. Co. 1928. Pp. vi, 480.)

Bowers, E. L., editor. *Selected articles on compulsory automobile insurance:*

liability and compensation for personal injury. Handbook ser. 3, vol. II. (New York: H. W. Wilson. 1929. Pp. 259. $2.40.)

CARROLL, M. R. *Unemployment insurance in Germany.* (Washington: Brookings Institution. 1929. Pp. x, 137.)

CARTWRIGHT, C. M. *Fire insurance from the standpoint of a policyholder.* (Chicago: LaSalle Ext. Univ. 1928. Pp. 38.)

DEITCH, G. A. and REYNOLDS, M. K. *Digest of insurance cases.* Vol., XL. *For the year ending October 31, 1927.* (Indianapolis: Rough Notes Co. 1928. Pp. xlix, 550.)

ECKER, F. H. *The trend of life insurance investments in the era of the second hundred billion.* Address delivered at the fortieth annual convention of the National Assoc. of Life Underwriters, Washington, D.C., September 26, 1929. (New York: Metropolitan Life Insur. Co. 1929. Pp. 16.)

FLANAGAN, L. *Insurance in the distribution of wealth.* (New York: L. Flanagan. 1929. Pp. vii, 200.)

HULVEY, C. N. and WANDEL, W. H. *Life insurance in Virginia.* (University, Va.: Institute for Research in the Social Sciences. 1929. Pp. xv, 167.)

Although a study of a single state, the method of analysis and generalizations drawn as to the service of insurance will prove suggestive to all students of the subject. The research covers the volume of business, its technical characteristics, group insurance and investments of companies.

LONGNECKER, J. W. *Selling insurance by coöperative advertising.* (New York: F. S. Crofts. 1929. Pp. 267. $2.50.)

MCCAHAN, D. *State insurance in the United States. A thesis.* (Philadelphia: Univ. of Pennsylvania Press. London: H. Milford. 1929. Pp. xvii, 290.)

POOLE, F. W. S. *The marine insurance of goods: a handbook for merchants, shippers, brokers, underwriters, adjusters of claims and others.* (New York: Pitman. 1928. Pp. 439. $4.50.)

RIEGEL, R. and LOMAN, J. H. *Insurance principles and practices.* Rev. ed. (New York: Prentice-Hall. 1929. Pp. 690. $6.)

SCHARLAU, M. *Die Entstehung neuer Versicherungszweige.* (Berlin: E. S. Mittler. 1929. Pp. 87.)

This monograph deals with the need for insurance as an economic device for meeting new risks incidental to progress in modern economic society. After consideration of the place of insurance in the capitalist régime, the development of new types of casualty, liability, and social insurance is outlined.

F. E. W.

WIGHT, G. T. *The first $100,000,000,000 of American life insurance.* Report transmitted to the Assoc. of Life Insur. Presidents, August 20, 1929. (New York: Assoc. of Life Insur. Presidents. 1929. Pp. 4.)

WINTER, W. D. *Marine insurance: its principles and practice.* 2nd ed. (New York: McGraw-Hill. 1929. Pp. xx, 494. $4.)

This second edition of Winter's non-technical textbook on marine insurance is in the main a reprint of the twenty-two chapters as published in 1919. The language is much the same, new paragraphs are added here and there, while the appendix contains the Hague Rules as modified in 1921, and the York Antwerp Rules of 1924. It is well to have this re-

vision present marine insurance principles as applied and extended during the ten years of overseas commerce since the close of the World War.

F. E. Wolfe

Annual cyclopedia of insurance in the United States, 1929. (New York: Index Pub. Co., 177 William St. 1929. Pp. 623.)

Originally issued in 1891, the series is continuously revised.

National Board of Fire Underwriters: proceedings of the sixty-third annual meeting, May 23, 1929. (New York: National Board of Fire Underwriters. 1929. Pp. 174.)

Pension laws of the 66th, 67th, and 69th Congresses relating to Civil War, Spanish War, and Indian Wars. (Washington: Supt. Docs. 1928. Pp. 22. 5c.)

The protection of seamen in case of sickness, including the treatment of seamen injured on board ship. I. The individual liability of the shipowner towards sick or injured seamen. II. Sickness insurance for seamen. (Geneva: International Labour Office. 1929. Pp. xii, 240.)

Pauperism, Charities, and Relief Measures

New Books

Kelso, R. W. *Poverty.* (New York: Longmans Green. 1929. Pp. viii, 374. $2.)

Hiebert, P. C. and Miller, O. O. *Feeding the hungry: Russia famine, 1919-1925; American Mennonite relief operations under the auspices of Mennonite Central Committee.* (Scottdale, Pa.: Mennonite Central Committee. 1929. Pp. 465.)

Tabular summary of state laws relating to public aid to children in their homes in effect January 1, 1929, and text of laws of certain states. 3rd ed. Children's Bureau, chart no. 3. (Washington: Supt. Docs. 1929. Pp. 37. 10c.)

Socialism and Co-operative Enterprises

Das Akkumulations-und Zusammenbruchsgesetz des Kapitalistischen Systems. By Henryk Grossmann. (Leipzig: C. L. Hirschfeld. 1929. Pp. xvi, 628.)

The suppleness with which the so-called capitalistic system withstood the strains of the World War and its aftermath convinced even Karl Kautsky, a lifelong and faithful disciple of Marx, that his master erred with regard to the vitality of the present order. But some of the younger socialists are of sterner stuff. Neither reasoning nor facts will dim their faith in the Marxian theology. It is "bourgeois" economics that fails on each vital issue; and it is Marx who set it aright. Mr. Grossmann belongs to this class.

The purpose of the book, which embodies part of a series of lectures delivered at the University of Frankfurt, is to explain what the author

considers the central theme of Marx's system, the over-accumulation of capital and the breakdown of capitalism. The study is divided into three parts. The first part outlines the literature on the subject, reprimanding "bourgeois" economists like Marshall and J. B. Clark for not treating the problem as Marx does, and chiding the socialist writers for not interpreting Marx as Mr. Grossmann does.

The second part deals with the main theme. While the author may claim, as he frequently does, originality at one point or another in his explanation of Marx, the ground in general is familiar. The constant capital yields no returns, and the surplus-value derived from the variable capital must supply funds for the rapid accumulation of constant capital as well as for the maintenance of labor and the business man. Since Marx assumes that the constant capital must increase at a much more rapid rate than the surplus-value, it is obvious that a point is to be reached when the surplus-value will be insufficient to gratify its three claimants. The result is that the rate of profits falls, so that the earnings on a larger capital are no more than on the previously smaller capital (p. 522). There is therefore a plethora of unemployed capital and labor; and capitalism meets its doom.

To the question how capitalism has managed to survive until now the third part supplies the answer. There are various modifying circumstances which retard the fatal end, but which are in the final reckoning of no avail: inventions, improvements, industrial combinations, colonization, the export of capital, speculation, etc.

Aside from the objections to the concepts of over-accumulation and over-production, it is not clear why there must be talk of a breakdown of capitalism. If the returns are meager, less capital will be accumulated, until an equilibrium is established at which adequate earnings prevail. The worst prospect may be J. S. Mill's stationary state, but no apocryphal extinction. Indeed Marx decreed that capitalism must have progressive accumulation, but what is the reason for this categorical imperative?

The work is characterized throughout by endless reiterations, ceaseless digressions, and wearisome disputations with everyone on land and sea. The book could well afford to be much smaller. There are also many examples of incautious reasoning and indiscriminate use of data. Thus it is unnecessary to take pains to prove that the machine displaces labor, because the very concept of machinery connotes labor-saving devices (p. 129); the fluctuations in general price levels are of no economic significance, because the relative values remain undisturbed (p. 304); "bourgeois" economists are vainly concerned over diminishing returns, for the earth is bountiful and science is a great aid, and it is rather the superabundance of goods that threatens trouble (p. 456); in the summer

of 1928 there were five million persons unemployed in the United States (p. 272).

Still the book displays dialectic ability and a fine acquaintance with Marxian literature; it also contains interesting discussions here and there. It should therefore be of value to those interested in Marxian interpretations and disputes.

M. M. Bober

Lawrence College

New Books

Laidler, H. W. and Thomas, N., editors. *The socialism of our times: a symposium.* (New York: Vanguard Press. 1929. Pp. xiv, 377. 50c.)

A symposium by more than thirty writers. The material is grouped under: (1) what socialists want; (2) socialism in the light of American and Russian developments; (3) tactics and next steps; (4) socialist theory. The writers by no means agree.

Kayden, E. M. and Antsiferov, A. N. *The coöperative movement in Russia during the war: consumers' coöperation; credit and agricultural coöperation.* Econ. and soc. hist. of World War, Russian ser. (New Haven: Yale Univ. Press. Pp. 436. $4.)

Rühle, O. *Karl Marx: his life and work.* Translated from the German by Eden Paul and Cedar Paul. (New York: Viking Press. 1929. Pp. 419. $5.)

Since the death of Karl Marx in 1883, the English speaking public interested in social movements has been watching in vain for a comprehensive life of this famous theorist of the modern socialist movement. Some fascinating short sketches of Marx's life have appeared from the pens of Beer, Liebknecht, Spargo, Laski and others; but until the present translation of Otto Rühle's book, no really adequate treatment of his life and works has been published in English.

Otto Rühle, the author, is well equipped for his task. He was a Social Democratic member of the Reichstag at the outbreak of the World War, resigning from that body as a protest against the voting of war credits, and has in recent years devoted himself to the study of social and economic problems. The present volume is a clear, scholarly and fascinating exposition of Marx, the man, and of the main tenets of the Marxian theory. The author introduces the reader to the cultured early home of Marx, describes his crowded school and university life and his struggles with the philosophic systems of the day, depicts his venture into journalism, his conversion to socialism, his remarkable friendship with Engels, his exile from his fatherland, the gradual unfolding of his economic philosophy, and his years of bitter poverty, of intense study, of writing and of organization in London. Accompanying the account of Marx's life, the author devotes many illuminating pages to the history of the times.

Though a thorough Marxist and admirer of Marx, Mr. Rühle never attempts to cover up the great socialist's failings. Sometimes, in fact, he seems to lean backward in exposing Marx's small frailties. Attempting to apply modern psychology to his subject, Rühle attributes to Marx an abnormally large inferiority complex, due to the fact that he had liver

trouble, was born a Jew and was the only child in the family. This inferiority complex, Rühle declares, was a driving force back of Marx's conversion to socialism and of his tremendous activity in the socialist movement. Few are likely to follow the author in this analysis. A defect of the book is the small amount of attention given therein to the criticism of the Marxian structure and to an appraisal of this criticism. But despite these shortcomings the book will prove a needy addition to socialist literature. The faithful translation of Eden and Cedar Paul from the German and the wealth of illustrations greatly increase its usefulness.

HARRY W. LAIDLER

Statistics and Its Methods

F. Y. Edgeworth's Contributions to Mathematical Statistics. By A. L. BOWLEY. (London: Royal Statistical Society. 1928. Pp. vii, 139.)

Mr. Bowley has written a notable epitome of Mr. Edgeworth's work pertaining to mathematical statistics. Three phases of the work stand out in the reviewer's mind: first, the emphasis on *a priori* probabilities in the applications of the theory of probabilities; secondly, a discussion of the "law of error" and the theories dependent upon it; and finally, the discussion of the "best mean."

The amount of misunderstanding about the roll of *a priori* probabilities is enormous. The number of foolish statements that have been made about such works as R. A. Fisher's brilliant papers in *Metron* concerning the coefficient of correlations of a population where the coefficient of correlation for a sample is known, and kindred subjects is amazing. Hence the clarity with which the limitations of the "genuine inverse method" is developed is refreshing. This method picks from a class of frequency curves that of a population from which the probability of drawing a given sample is a maximum rather than the frequency distribution from which it is most probable that the sample was drawn. The second distribution is without meaning unless some arbitrary and probably false assumption about the nature of the universe is made.

In the exposition of the law of error one feels the lack of an evaluating discussion. Perhaps no Englishman could give this, since both Pearson's and Edgeworth's systems are so typically English and the Gram-Charlier theory so continental. Edgeworth hypothecates a set of m frequency curves for the contributions made by m separate entities to a measurable quantity. From this is derived a frequency function as a power series in $m^{-1/2}$. The term independent of $m^{-1/2}$ gives the normal distribution function. For a "measurable" that fits these hypotheses we have a very beautiful development; however, we have little assurance that these assumptions are satisfied for more than a few useful applications. The

use of this method must be justified empirically as a mode of description rather than giving us a law of nature. The Pearsonian system is derived from the integration of a differential equation arising as a natural generalization of that from which the normal curve is derived. This system is also justified by the fact that many curves can be easily fitted by this method. In many cases this has already been done. The reviewer likes better than either of these the method of the Gram-Charlier series, bringing to bear on the subject of frequency curves, a body of theory akin to harmonic analysis. This system is particularly appealing as it is purely descriptive and does not give one the false sense of security derived from a model universe, a universe seldom even approximated outside of gambling. It can, of course, be argued that a system based on a law of error leads to a rational theory of correlation; however, the application of such a theory has ultimately only an empirical justification.

The discussion of the "best mean" is a contribution to a subject that has had much careless handling. The question as to whether the median, the mode, the average, or the average of a central group should be used in determining such quantities as seasonal variations is much debated; but the arguments are usually pretty loose. The careful work of Edgeworth on the use of the median and the opening of the question as to the precision of various means is of great value. This forms merely the start of the discussion of a subject which is likely to be a live one for some time.

The only major criticism of this work would be that Mr. Bowley has succeeded too well in the task that he set himself. He has consistently tried to epitomize Edgeworth's work rather than add to or evaluate it. His success is marked, and if the author were of less distinction we should rejoice at this success. As it is we cannot help wishing that Mr. Bowley had made additions and expressed opinions of his own. This is particularly needed in the exposition of the "law of error" and in the discussion of the "best mean." However, we must not let our regret that the author did not do more, blind us to the great value of this concise statement of a large body of theory, nor to the fact that in simplifying the analysis and exposition the author has himself contributed work of real originality. If the reading at points is difficult, it is not due to lack of expository skill but to the need of great condensation. Moreover, the references are clearly made so that Edgeworth's original papers may be consulted when available.

The book is of real value though, of course, it merely describes the work of one man in a subject that has been rapidly developed by many.

MARK H. INGRAHAM

University of Wisconsin

New Books

ALEXANDER, M. W. *International industrial statistics as an aid to world progress.* Address delivered at the Fifth General Congress of the International Chamber of Commerce, Amsterdam, July 9, 1929. (New York: National Industrial Conference Board. 1929. Pp. 17.)

BANISTER, H. *Elementary applications of statistical method.* (London and Glasgow: Blackie. 1929. Pp. 57. 3s. 6d.)

BAUER, G. N. *Mathematics preparatory to statistics and finance.* (New York: Macmillan. 1929. Pp. vii, 337. $2.)

A study of the simpler mathematical methods and principles that occur in statistical analysis. Treats of graphs, straight line law, the law of the parabola, logarithms, progression, the exponential law, the power law, curve fitting, permutations and probability. Exercises with answers are added.

FLUX, A. W. and BOWLEY, A. L. *The national income: an address and discussion.* Reprinted from the *Journal of the Royal Statistical Society*, vol. XCII, parts I and II, 1929. (London: Royal Statistical Soc. 1929. Pp. 53. 2s.)

GREGORY, C. A. and RENFROW, O. W. *Statistical method in education and psychology.* (Cincinnati: C. A. Gregory Co. 1929. Pp. 228.)

HOLZINGER, K. J. and MITCHELL, B. C. *Exercise manual in statistics.* (Boston: Ginn. 1929. Pp. 165. $2.40.)

LOVITT, W. V. and HOLTZCLAW, H. F. *Statistics.* (New York: Prentice-Hall. 1929. Pp. xi, 304. $4.)

TISCHER, A. *Grundlegung der Statistik: systematischer Grundriss einer Theorie der allgemeinen Statistik auf rein formaler Grundlage.* (Jena: Fischer. 1929. Rmk.11.)

WALKER, H. M. *Studies in the history of statistical method.* (Baltimore: Williams & Wilkins. $5.)

WAUGH, F. V. *Quality as a determinant of vegetable prices.* (New York: Columbia University Press. 1929. Pp. 154. $2.50.)

This volume represents the newer attack on the problem of price behavior. Most studies of price behavior have sought explanations of changes in price from one period to another. They have sought to eliminate quality factors mainly by selecting for study the prices of the more important grades consistently quoted. The present study, on the other hand, eliminates the effect of supply and day of the week as the principle factors causing time variations and then proceeds to analyze the variations associated with measurable quality factors. Just as the older studies have sought, for example, to isolate and measure exactly the price changes resulting from given changes in supply, so this study seeks to isolate and measure exactly, for example, the influence of variation in the amount of green in asparagus.

The study should be of value to growers who desire to adjust production to market demands since it expresses demand in terms of price. As the author well points out, however (page 54), any important shift in production would lead to a change in the price differentials. New York City, for example, is often mentioned as a market which pays a substantial premium for white eggs, over brown. It is quite certain, however, that the premium for white eggs would disappear long before white eggs entirely displaced brown on that market because there are doubtless many persons who would not pay such a premium.

The writer compares the statistical method of studying consumer demand with this so-called "demand survey." The latter, he points out, "is essentially the compilation and summarization of the likes and dislikes of a group of dealers or consumers for varieties, types, grades and qualities of a commodity." The statistical analysis, on the other hand, makes no attempt to discover individual preferences of dealers or consumers, but measures the reaction of the market in general to quality factors in terms of prices. He concludes (page 108) that "the two methods supply data of a different nature, and that they supplement rather than duplicate each other." Furthermore "the ideal study of demand should use both methods." The survey should precede the statistical study in order to indicate the qualities which it may be desirable to measure.

The book should prove to be a stimulus to further analysis of price behavior.

H. E. ERDMAN

WILLIAMS, J. H. *Elementary statistics.* (Boston: Heath. 1929. Pp. xvi, 220. $2.)

An elementary book, written more particularly for those interested in educational statistics. A large number of simple exercises are included. The volume is probably too restricted to be of great service in the analysis of complicated economic data.

Annuaire statistique de la Suisse. (Berne: Bureau Fédéral de Statistique. 1929. 4fr.)

Cours de statistique, professé en 1927-8 à la faculté de droit. (Paris: Les Presses Universitaires de France. 1928. Pp. 320. 40fr.)

International statistical year-book, 1928. (Geneva: League of Nations, Econ. and Finan. Section. 1929. Pp. 233.)

Industrielle Produktionsstatistik: Sammlung produktionsstatistischer Ergebnisse bis zum Jahre 1928. Sonderhefte zu Wirtschaft und Statistik, no. 6. (Berlin: Reimar Hobbing. 1929. Pp. 121.)

Methods of compiling statistics of railway accidents. Studies and reports, ser. N, no. 15. (Geneva: International Labour Office. 1929. Pp. 82. 2s.)

Renseignements sur l'organisation actuelle des statistiques de l'état civil dans divers pays. (The Hague: L'Office Permanent de l'Institut International de Statistique. 1929. Pp. 73.)

THORSTEIN BUNDY VEBLEN

1857-1929

On August 3 of this year Thorstein B. Veblen died in California at the age of seventy-two, after a period of retirement due to ill health. With his passing, American economics has lost its most picturesque figure, and the leading influence of the intellectual generation immediately succeeding the founders of the American Economic Association.

In the spring of 1880 a member of the Junior class at Carleton College presented to the faculty an unprecedented request. He asked to be permitted, at the end of that academic year, to take the examinations for the Junior and Senior classes both. Attempts to dissuade him were futile; he took all responsibility and asked only to make the attempt at his own risk. The task seemed impossible, as the academic year was already far spent; and the faculty feared injury to his health. Nor were they inclined to make concessions to this particular student, whose unconventional character had not endeared him to an institution where smoking was ground for expulsion and the professor of mathematics opened every class exercise with prayer. But permission could hardly be refused; and the tests were given, that in economics being under a young professor by the name of John Bates Clark. It soon became evident that the student could not be baffled by any legitimate question; and he passed a virtually flawless examination. In this manner Thorstein Veblen received his college degree, rated by one at least of his professors as the most brilliant man the college had graduated.

Eleven years later, J. Laurence Laughlin, rising young professor at Cornell, made the acquaintance of a young Fellow in the department; a man worn with illness and plainly a stranger to prosperity, but with an intellectual vitality and a fund of wide and curious learning which so impressed him that when he went next year to head the department at the new University of Chicago he took the young Fellow with him. Thus Veblen began his academic career in economics. He had taken his doctor's degree in philosophy at Yale in 1884, and subsequently continued by private reading to add to his erudition in the fields of biology, anthropology, and cultural history. This constituted, for an economist, a unique background.

At Chicago, before the end of the nineties, his early critical essays challenged the attention of the economic world with their unaccustomed standards and unsettling demands. Then followed his career on the faculties of Stanford, the University of Missouri and the New School for Social Research; and the succession of volumes which established his reputation. Always aloof from the organized activities of the economic guild, he was in 1926 offered the nomination for presidency of the American Economic Association, but declined.

As to the merits of his work, opinions differ more widely and more fervently than on any other writer of equal prominence. He is rated among the great economists of history, or as no economist at all; as a great original pioneer or as a critic and satirist without constructive talent or achievement. And he was, one might almost say, all of these things; from different standpoints and by different criteria, each of which it is possible to understand and even to appreciate. One thing at least can be said. If he chose to paint

after a futurist technique of his own devising, it was not for lack of capacity to master the academic canons. He had thought through them to his own satisfaction and passed on to other areas of inquiry which appeared to him more interesting and more fruitful.

His critical essays probably left the majority of readers, who were not forewarned and prepared, resentfully rubbing numerous sore spots and wondering with some bewilderment what it was all about. They were criticised for not doing what they had never set out to do, and for not being what it had never occurred to them to be; while the worth of what they had undertaken was brushed aside with airy disparagement. And Veblen's style resembled a barbed-wire entanglement, difficult to penetrate and with rapier-sharp points to prick the unwary. Those who quickly dismissed the problem are probably those who have not seen Veblen as an economist at all, or have seen him as merely a critic and satirist. Those who continued to wonder, and to some purpose, owe him the greatest of educational experiences: that of being forced to rethink their basic conceptions, and to make terms of some sort with a radically different point of view which could not be wholly dismissed.

His positive analysis of economic society includes two main groups of elements. There are evolutionary studies of our ways of thinking and of doing things. These include the effects of changing economic techniques (*e.g.*, the *Cultural Incidence of the Machine Process*) and the continuing effect of older cultural forces (*e.g.* the *Theory of the Leisure Class*). These studies regularly culminate in a changed perspective on the character of the present economic system. In this, the second group of elements in Veblen's positive analysis, he focussed attention on those things which were left out of the customary study of levels of static-competitive equilibrium. His treatment of pecuniary as distinct from industrial employments would be regarded by the orthodox economist as a study largely in the realm of the "higgling" of the bargaining process: something whose existence he readily admitted but which he excluded from the search for competitive norms, treating it as a somewhat incidental excrescence. By styling this process "business" Veblen added the implication that this neglected activity is the main preoccupation and effect of private business, and that the limitations imposed on it by competition are incidental and not sufficiently effective to deserve serious analysis. Their results he admitted casually, if at all, under the modicum of serviceability which is prerequisite to pecuniary profit, not troubling even to trace this to its causes. After which he would often clinch the effect by remarking that if the terms he had used seemed to carry unfavorable implications, this was solely the result of the nature of the facts themselves. Thus did he thinly mask a surpassingly able use of the logical devices of selective emphasis—devices not found in treatises on the syllogism but ever-present in the actual processes of human thinking.

Veblen's analysis, then, is not the completely objective tracing of impersonal sequences of cause and effect which his essays on method call for; but is—as anything human must probably be—a matter of selected aspects. One of the unanswered puzzles about this intriguing thinker, at least to those who did not know him intimately, is his own attitude toward this subjective element entering into his avowedly objective treatment. It may be a trait of genius to combine clear consciousness of method with a gift of leaping over

some of the steps and intuitively seizing tools apt to the securing of desired effects. And there is no point in obtruding ponderous questionings upon such a delightfully agile play of thought around a theme whose essential consistency is so plainly evident.

Doubtless the facts did dictate the interpretation Veblen gave them—he being what he was. But among the most controlling of these facts was the selective emphasis he found in the orthodox treatment. And by presenting selective aspects calculated to offset those of orthodoxy, he has rendered the greatest possible service toward a better balanced treatment than either. And in this matter balance is probably the closest approach to objectivity of which the human mind is capable. This end, needless to say, cannot be attained by blind discipleship, but by a discriminating assimilation.

And such assimilation has not been wanting. Veblen has influenced Davenport, Mitchell and Hoxie, to name only three: men of too great independence to be anyone's disciples and therefore capable of transmitting Veblen's influence as it needed to be transmitted. In such hands it becomes, not a finished gospel, but an orienting impulse and an assortment of concepts to be tested by the work they will do.

Was Veblen an economist? He was not a mere economist, certainly. A philosopher first, and then a student of human cultures, he was always interested in these things for their own sakes as well as in their relation to purely economic facts. Was he a scientist? He was not, perhaps, by the criterion of John Stuart Mill, who held that it was only by virtue of competition and competitive equilibria that economists can be scientists at all. But that criterion can no longer be said to be orthodox.

Was Veblen "constructive"? Not in the sense of constructing a "system" of defined levels of equilibrium or other definitive results; the materials with which he worked did not lend themselves to this, nor was it his idea of a proper (and Darwinian) scientific goal. Not in the sense of making his work an outgrowth of previous orthodoxy; that was not to be expected. Not in the sense of furnishing his followers a complete substitute for that orthodoxy in the form of propositions with which to solve all problems—that is far more than one man's work. He was not constructive in the sense of explaining the socially constructive forces in the world of private business—it was not in that direction that the prevailing emphasis needed to be redressed. And not in the sense of proving to what quantitative degree business is governed by the principles he assumes—that test is only beginning to be applied to any of our doctrines. But if an independent explanation of important and neglected ranges of economic facts be constructive, Veblen meets the test in generous measure.

And he has left his mark. Since he began his work, the conception of the evolution of economic institutions has acquired the beginnings of real meaning for a majority of economists; and "cumulative causation" is part of our mental equipment. The emphasis has swung from reasoning on abstract levels of equilibrium to the observation of actual behavior and the organization of its sequences; and man is beginning to be really viewed as a product of a biological past rather than as a utilitarian machine. We are suspicious of subconscious motives and alert to wastes inherent in business practices. Veblen is, of course, not responsible for all this; and much of it has taken forms he never espoused or practised. But there is enough of his influence in it to make us wonder whether we have not had a prophet among

us. A prophet's road is not the route to easy popularity with his contemporaries. But this one has not been wholly without honor, even in his own country.

JOHN MAURICE CLARK

Columbia University

JEREMIAH WHIPPLE JENKS

1856-1929

Dr. Jeremiah W. Jenks died August 24, 1929, at Memorial Hospital, New York City. He was born September 2, 1856, at St. Clair, Michigan, and graduated in 1879 at the University of Michigan. He also studied at the University of Halle, where he received the degree of Ph.D. He entered upon the study of law and was admitted to the bar in 1881. In 1886 he became professor of political economy at Knox College, Illinois, where he remained three years. He was connected with Indiana University for a short period; and in 1891 he was appointed professor of political economy at Cornell University. In 1912 he transferred to New York University, where he became closely associated with the work of the Alexander Hamilton Institute.

Professor Jenks engaged in a wide range of governmental activities. He was an expert agent of the federal Industrial Commission on the investigation of trusts, 1899-1901; special commissioner of the War Department to investigate questions of currency, labor, internal taxation and police in the Orient, 1901-02; special expert on currency reform of the government of Mexico, 1903; member of the federal Commission on International Exchange, 1903-04; member of the United States Immigration Commission, 1907-10.

In 1906 he was elected president of the American Economic Association, serving for two years. His best known books are *The Trust Problem,* published in 1900 and *The Immigration Problem* (with W. J. Lauck), 1913, each of which has passed through several editions.

DOCUMENTS, REPORTS, AND LEGISLATION

Industries and Commerce

In the series of Trade Information Bulletins published by the Department of Commerce have appeared: No. 628, *The Automotive Market in Uruguay,* by H. H. Tewksbury (pp. 25, 10c.); No. 629, *Automotive Markets of Scandinavian Countries and Finland,* by H. C. Schuette (pp. 55, 10c.); No. 633, *Marketing Industrial Machinery in the Netherland East Indies,* by Donald Renshaw (pp. 23, 10c.); No. 634, *Motion Pictures in Japan, Philippine Islands, Netherland East Indies, Siam, British Malaya, and French Indo-China* (pp. 27, 10c.); No. 635, *Flour Markets of Central America,* by F. T. Pope (pp. 11, 10c.); No. 636, *Banking and Trade Financing in the United Kingdom: A Review of the British Bank and Credit System with a Description of the Methods Used in the Financing of Trade and Industry,* by F. E. Lee (pp. 32, 10c.); No. 637, *Foreign Trade of the United States in the Calendar Year 1928 according to the International Statistical Classification* (pp. 9, 10c.); No. 638, *Industrial Machinery in Italy,* by A. A. Osborne (pp. 34, 10c.); No. 639, *Iron and Steel Trade and Industry of Great Britain* (pp. 20, 10c.); No. 640, *Leather Trade of the Netherlands,* by J. Schnitzer (pp. 18, 10c.); No. 641, *Latin American and Canadian Markets for American Motion-Picture Equipment,* compiled by N. D. Golden (pp. 38, 10c.); No. 642, *Trends in Japan's Trade and Industries,* by H. A. Butts (pp. 26, 10c.); No. 643, *The Marketing of Tungsten Ores and Concentrates,* by J. W. Furness (pp. 20, 10c.); No. 644, *British Trade in Rubber and Rubber Products,* by R. B. Macatee (pp. 15, 5c.); No. 645, *Export Markets for American Brushes,* compiled by J. T. Harding and E. H. Bourgerie (pp. 27, 5c.); N. 646, *Boot and Shoe Industry and Trade in Germany,* by A. D. Cook (pp. 38, 10c.); No. 647, *Cattle Raising in Argentina,* by D. C. Sycks (pp. 14, 5c.); No. 648, *American Underwriting of German Securities* (pp. 15, 10c.); No. 649, *Installment Selling of Automobiles in Latin America* (pp. 62, 10c.); No. 650, *Foreign Trade of the United States in the Fiscal Year 1928-29,* by G. E. Witherow (pp. 22); No. 651, *Leather Trade of Egypt,* by J. Schnitzer (pp. 23, 5c.); No. 652, *The French Chemical Industry and Trade in 1928,* by D. J. Reagan (pp. 41, 10c.); No. 653, *The Big Five in Japanese Banking* (pp. 30, 10c.); No. 654, *Budgets of European Countries, 1929, Part II, Western and Central Europe,* by R. M. Stephenson and P. M. Copp (pp. 61, 10c.); No. 655, *Markets for Building Materials. Part I, Canada and Newfoundland* (pp. 55, 10c.); No. 656, *French Experience with Defaulted Foreign Bonds,* by H. M. Cochrane (pp. 19, 10c.); No. 657, *Latin American Financial Developments in 1928* (pp. 23, 10c.); No. 658, *South American Markets for Rubber Sundries and Specialties* (pp. 24, 10c.); No. 660, *Markets for Building Materials. Part II. Mexico, Central America and the West Indies* (pp. 67, 10c.); No. 661, *Leather Trade of Italy,* by J. Schnitzer (pp. 21, 10c).

In the Trade Promotion series have appeared No. 76, *Mineral Raw Materials: Survey of Commerce and Sources in Major Industrial Countries,* by J. W. Furness, L. M. Jones and F. H. Blumenthal (pp. 278, 45c.); No. 79, *Handbook of Foreign Tariffs and Import Regulations on Agricultural Products. I. Fresh Fruits and Vegetables,* by R. S. Hollingshead and R. P.

Wakefield (pp. 109, 20c.); No. 81, *Representative International Cartels, Combines and Trusts,* by W. F. Notz (pp. 76, 15c.); No. 82, *Taxation of Business in Italy,* by M. B. Carroll (pp. 125, 20c.); No. 83, *Public Finances of Far Eastern Countries, Fourth (1929) Survey,* by H. M. Bratter (pp. 99, 20c.); No. 84, *The Automotive Markets in Argentina,* by H. H. Tewksbury (pp. 106, 20c.). No 86, *Markets for American Toilet Preparations* by M. M. Smith and J. N. Taylor (pp. 62, 15c.).

The Tarriff Commission has added to its Tariff Information Surveys a memorandum on *Salmon* (pp. 94, 20c.).

In the studies made on differences in costs of production the Tariff Commission has published reports on *Window Glass* (pp. 44, 10c.); *Flaxseed* (pp. 64, 15c.); *Logs of Fir, Spruce, Cedar or Western Hemlock* (pp. 42, 10c.); *Milk and Cream* (pp. 74, 15c.); *Granite* (pp. 72, 15c.); *Cotton Hosiery* (pp. 74, 15c.); *Canned Tomatoes and Tomato Paste* (pp. 79); *Linseed Oil* (pp. 66, 15c.); *Corn or Maize* (pp. 91).

The Bureau of Railway Economics in its series on *Commodity Prices and Their Relation to Transportation Costs* has issued Bulletin No. 35, *Live Stock: Cattle and Calves, Hogs and Sheep* (Washington, July, 1929). According to this report "the proportion of the purchaser's dollar absorbed by freight charges dropped from 5.6 cents in 1924 to 3.6 cents in 1928, a decrease of 36 per cent. That absorbed by other costs of distribution dropped from 3 cents in 1924 to 2 cents in 1928, a decrease of 33 per cent. Bulletin No. 36, *Fertilizer,* concludes that for the period covered there was no definite relationship between the prices of fertilizer and transportation costs.

Labor

The federal Bureau of Labor Statistics has issued the following bulletins:

No. 465, *Beneficial Activities of American Trade-Unions* (pp. 229, 60c.).

No. 475, *Productivity of Labor in Newspaper Printing,* by S. Kjaer (March, 1929, pp. 253, 50c.). This is a historical survey showing the changes in different processes over a considerable period of time.

No. 485, *Proceedings of the Fifteenth Annual Meeting of the International Association of Industrial Accident Boards and Commissions Held at Paterson, New Jersey, September, 11-14, 1928* (June, 1929, pp. 256, 50c.).

No. 488, *Deaths from Lead Poisoning, 1925-1927,* by F. L. Hoffman (June, 1929, pp. 37, 10c.).

No. 490, *Statistics of Industrial Accidents in the United States to the End of 1927* (pp. 187, 30c.).

No. 492, *Wages and Hours of Labor in Cotton-Goods Manufacturing, 1910 to 1928* (pp. 52, 10c.).

No. 494, *Labor Legislation of Uruguay* (July, 1929, pp. 70).

No. 495, *Retail Prices, 1890 to 1928* (pp. 219, 35c.).

No. 499, *History of Wages in the United States from Colonial Times to 1928* (pp. 527, 80c.).

The hearings on *Unemployment in the United States* before the Senate Committee on Education and Labor, held in December, 1928, January and

February, 1929, have been printed for the use of the Committee (Washington, 1929, pp. 517). This contains a large amount of material with the inclusion of statistical data and diagrams dealing with the causes of unemployment, the regularization of work, unemployment insurance, and employment offices.

The *Report of Wage and Personnel Survey* by the Field Survey Division of the Personnel Classification Board has been printed as House Document No. 602, 70th Congress, 2nd Session (Washington, pp. 511, 60c.).

The State Department of Labor of New York has published the following special bulletins:

No. 158, *Some Social and Economic Aspects of Homework* (Albany, pp. 40).

No. 159, *New York Labor Laws Enacted in 1929* (Albany, pp. 64).

No. 160, *Cost of Compensation, Year Ended June 30, 1929* (Albany, pp. 73).

No. 161, *Court Decisions on Workmen's Compensation Law, September, 1928—July, 1929, All Subjects* (Albany, pp. 278).

The State Department of Labor of New York has also published *Workmen's Compensation Law and Industrial Board Rules with Amendments, Additions and Annotations to September 1, 1929* (Albany, pp. 160).

Among the annual reports received are the following:

Tenth Report of the Industrial Commission of Colorado for the Biennium December 1, 1926 to November 30, 1928 (Denver, pp. 68).

Annual Report of the Department of Labor and Industries of the Commonwealth of Massachusetts for the Year Ending November 30, 1928 (Boston, pp. 106).

Annual Report of the Industrial Commissioner of the State of New York for the Twelve Months Ended December 31, 1928 (Albany, pp. 270).

Eighteenth Annual Report on Labour Organization in Canada for the Calendar Year 1928 (Ottawa, pp. 253).

Public Utilities

The following annual reports dealing with public utilities have been received:

Report of the Public Service Commission of Maryland for the year 1928 (Baltimore, pp. 512).

Fortieth Biennial Report of the Railroad and Warehouse Commission of the State of Minnesota to the Governor for the Biennial Period Ending November 30, 1928 (Minneapolis, pp. 587).

Seventeenth Annual Report of the Public Utilities Commission of the State of Rhode Island for the Year Ending December 31, 1928 (Providence, pp. 252).

State of New Jersey Board of Public Utility Commissioners: Statistics of Utilities, Private and Municipal, for the Year 1928 (Trenton, pp. 120).

Nineteenth Annual Report of the Board of Public Utility Commissioners for the State of New Jersey for the Year 1928 (Trenton, pp. 49).

Seventeenth Biennial Report of the Railroad and Public Utilities Commission of the State of Tennessee, December 1, 1926 to November 30, 1928 (Nashville, pp. 288).

Public Finance

The Bureau of the Census has issued *Financial Statistics of Cities Having a Population of over 30,000, 1927* (Washington, pp. 503, $1.25).

Among the annual reports are the following:

Final Report of the California Tax Commission Submitted to the Governor of California, March 5, 1929 (Sacramento, pp. 317).

Annual Report of the Commissioner of Corporations and Taxation of the Commonwealth of Massachusetts for the Year Ending November 30, 1928 (Boston, pp. 243).

Thirteenth Annual Report of the New Jersey State Board of Taxes and Assessment for the Year Ending June 30, 1928 (Trenton, pp. 820).

Fourteenth Annual Report of the South Carolina Tax Commission to the Governor and General Assembly (Columbia, pp. 212).

Report of the Tennessee Tax Commission to Governor Henry H. Horton (Nashville, pp. 27).

NOTES

In accordance with the notice in the September issue, the forty-second annual meeting of the AMERICAN ECONOMIC ASSOCIATION will be held in Washington, D.C., December 27-30, with headquarters at the Washington Hotel. The preliminary program has been arranged as follows:

Friday, December 27

10:00 A.M. ROUND TABLE CONFERENCES

1. "Economic History (A Discussion of Economic Stages)," Chairman, Herbert Heaton, University of Minnesota
   Discussion: N. S. B. Gras, Harvard University
2. "The Corporation, the Investor and the State," Chairman, George O. May, Price, Waterhouse and Company, New York City
   Discussion: A. A. Berle, New York City
   Stephen A. Van Ess, Rushmore, Bisbee and Stern, New York City
   I. Leo Sharfman, Brookings Institution

2:30 P.M. ROUND TABLE CONFERENCES

1. "Marketing (Modern Tendencies in Food Distribution)," Chairman, Paul L. Miller, Iowa State College
   Discussion: Harvey Baum, Atlantic Commission Company
   John Brandt, President, Land O'Lakes Creameries, Inc.
   V. H. Pelz, American Institute of Food Distribution
   E. L. Rhoades, University of Chicago
2. "The Public Works Plan and Unemployment," Chairman, Leo Wolman, New York City
   Discussion: J. M. Clark, Columbia University
3. "The Theory of Economic Dynamics as related to Industrial Instability," Chairman, Frank W. Taussig, Harvard University
   Discussion:
   F. C. Mills, Columbia University
   F. B. Garver, University of Minnesota
   Ralph W. Suter, Columbia University

5:00 P.M. Meeting of the Executive Committee

8:00 P.M. FIRST SESSION

General Topic: The Chief Economic Problems of Mexico
Papers: Joseph Davis, Food Research Institute
Ernest Gruening, editor, Portland Evening News
Discussion:
Max Handman, University of Texas
Frank Tannenbaum, New York City
Joseph E. Sterrett, New York City

Saturday, December 28

9:00 A.M. BUSINESS MEETING: Reports of Officers and Committees, etc.

10:00 A.M. SECOND SESSION

General Topic: The Reparations Settlement and the International Flow of Capital
Papers: John Williams, Harvard University
James W. Angell, Columbia University

2:30 P.M. THIRD SESSION (Joint Meeting with the American Statistical Association)

General Topic: Commodity Price Forecasting

8:00 P.M. FOURTH SESSION (Joint Meeting with the American Sociological Society and the American Statistical Association)

Presidential Addresses:

William F. Ogburn, American Sociological Society
Edwin B. Wilson, American Statistical Association
Edwin F. Gay, American Economic Association

Monday, December 30

9:00 A.M. BUSINESS MEETING: Election of Officers, etc.

10:00 A.M. FIFTH SESSION: Presiding officer, Adolf C. Miller, Federal Reserve Board

General Topic: The Federal Reserve Board—Its Problems and Policy

Papers: A. C. Whitaker, Stanford University
Franz Schneider, Jr., financial editor, New York Sun

12:00 P.M. Meeting of the Executive Committee

2:30 P.M. SIXTH SESSION (Joint Meeting with the American Farm Economic Association)

General Topic: Economic and Social Consequences of Mechanization in Agriculture and Industry

Papers: Edwin F. Nourse, Brookings Institution
Henry S. Dennison, Dennison Manufacturing Company
Elton Mayo, Harvard University

The following names have been added to the membership of the AMERICAN ECONOMIC ASSOCIATION since August 1:

Blackburn, B., Household Finance Corp., 360 N. Michigan Ave., Chicago, Ill.
Brigden, J. B., Australian Oversea Transport Assoc., 8 Young St., Sydney, N. S. W., Australia.
Brown, E. S., 217 Byington Bldg., Reno, Nevada.
Caldwell, M. G., Ashland College, Ashland, Ohio.
Campbell, A. S., Emory and Henry College, Emory, Va.
Christy, W. B., Arizona State Teachers College, Tempe, Arizona.
Crowther, G., 777 Yale Station, New Haven, Conn.
Davis, R. E., Commercial Research Dept., Goodyear Tire and Rubber Co., Inc., Akron, Ohio.
Dewey, L. E., New York University, New York City.
Engberg, R. C., Treasury Dept., Federal Farm Loan Bureau, Washington, D.C.
d'Essipri, M. S., Washington Trust Co., Pittsburgh, Pa.
Fink, E., 777 S. Euclid Ave., Pasadena, Calif.
Geeting, R. E., Ohio Northern University, Ada, Ohio.
Goetz, B. E., 5472½ University Ave., Chicago, Ill.
Hall, W. S., Western Maryland College, Westminster, Md.
Johanningsmeier, O. G., Purdue University, W. Lafayette, Ind.
Madegan, W. A., 6019 Winthrop Ave., Chicago, Ill.
Meek, H. B., Cornell University, Ithaca, N.Y.
Owen, W. V., 218 Sheetz St., W. Lafayette, Ind.
Pasvolsky, L., 26 Jackson Place, Washington, D.C.
Ramsey, R., 501 Industrial Trust Bldg., Wilmington, Del.
Ronk, S. E., 409 Harrison St., W. Lafayette, Ind.
Rusby, P., Alfred University, Alfred, N.Y.
Taylor, A. E., University of Pennsylvania, Philadelphia, Pa.
Tilton, C. G., Connecticut Agricultural College, Storrs, Conn.

Tsang, K. S., Ex-German Concession, 18 Chekiang Rd., Tientsin, China.
Vacek, J., 500 Riverside Drive, New York City.
Wandel, W. H., Box 347, University, Virginia.
Zucker, J. S., 1338 Taylor St., N.W., Washington, D.C.

It is proposed to establish a fund at Harvard University as a memorial to the late Allyn A. Young, professor of economics.

A substantial amount has already been subscribed by a few intimate friends. In the belief that the fund will more adequately commemorate the widespread affection and esteem in which Professor Young was held, if it comes from a wider circle of contributors, further subscriptions are now invited. Contributions of any amount will be welcome. Checks, made payable to Harvard University, may be sent to either Professor A. E. Monroe or Professor E. S. Mason in care of the Department of Economics, Plympton Street, Cambridge, Massachusetts.

The American friends of Profesor Hobhouse have formed a committee to further the memorial fund with which his name may be permanently associated and which may be used to assist in the perpetuation of his influence. It will be decided at a later date whether the fund raised can be used best for a lectureship, a scholarship or the publication of studies in the social sciences. The chairman of the American committee is Professor Edwin R. A. Seligman, Columbia University, New York City.

A meeting of the American Statistical Association was held in New York October 17 for the discussion of "The New Trend in Distribution." Among the topics treated were "The Chain Store Development in the Food Field and Its Probable Future Growth;" "The Critical Phase in Mass Distribution;" "Economic Importance of Chain Store Development and Its Probable Growth;" "Trends of Expense and Profit Ratios in Department Stores," and "Some Modern Retailing Trends."

The University of Wisconsin has established a separate administrative department of sociology and anthropology beginning with the current academic year. Prior to this time the work in sociology was organized within the department of economics.

The Special Libraries Association of Providence, Rhode Island, has issued a booklet entitled *Descriptive List for Use in Acquiring and Discarding United States Government Periodical Mimeographed Statements.* This list outlines the commercial, industrial and financial releases of a statistical nature issued by the various government bureaus. These government releases are listed alphabetically and indexed according to the individual issuing governmental bureaus. A subject index also is provided. The list will be of service to all students who are desirous of securing the maximum advantage from these current releases. The price of the magazine is $1.75 and it may be obtained from the Special Libraries Association, Providence, Rhode Island.

The Babson's Statistical Organization, Inc., has made a comparison of the physical volume of business in the United States and in Canada and found that, although the movements of the business volume in the two countries have been markedly similar from 1915 through 1926, there has been a more rapid

rate of growth of business volume in Canada than in the United States since that time. The index of the physical volume of Canadian business stands around 150, whereas that of the United States is around 120, both compared with the period 1922 through 1925 as 100.

The directors of the National Bureau of Economic Research will appoint three Research Associates for the academic year 1930-31. Each Associate will receive a stipend of $3,600 per year, plus the expenses of the round trip between his home and New York. He will be in residence in New York during eleven months of the year beginning September 15, 1930.

It is desirable that candidates for appointment as Research Associates have definite research projects under way at the date of application, and that these projects should have reached such a stage that completion within a period of one year may ordinarily be expected. Research projects proposed by the candidates may fall in fields now cultivated by members of the staff of the National Bureau, or may relate to subjects not hitherto covered in the work of the National Bureau. It is assumed, however, that the work of Research Associates will deal primarily with the quantitative aspects of economic problems.

Publication rights to the results of studies conducted by Research Associates will be reserved to the National Bureau of Economic Research.

Appointment of Research Associates will be made upon recommendation of a committee of six, five to be chosen from the group of university representatives on the Board of Directors of the National Bureau, the sixth to be appointed by the Social Science Research Council.

Applications for appointment should be submitted to the Directors of the National Bureau of Economic Research, 51 Madison Avenue, New York City, not later than Feb. 1, 1930. Each application should be accompanied by a summary statement describing the research project on which the applicant proposes to work. This statement should indicate the status of the project at the time the request is submitted. It may be accompanied by manuscript or other material. Since the National Bureau cannot assume responsibilty for the safe return of such material, duplicate copies should be retained by the applicant. Application forms will be forwarded upon request.

The Social Science Research Council announces its second annual list of Grants-in-Aid. Altogether, 37 scholars received support, among whom 5 worked in the field of economics: Barbara Nachtrieb Armstrong, University of California, "Insuring the Essentials, a Study Treating Social Insurance and Minimum Wage as Complementary Parts of One Socio-Economic Program for the Control of Poverty;" Earnest McKinley Fisher, University of Michigan, "Study of the Economic Problems Involved in Public or Semi-Philanthropic Housing Plans;" Leonard Bayliss Krueger, Oberlin College, "A History of Financial Institutions in Wisconsin;" Claudius T. Murchison, University of North Carolina, "The Cotton Textile Industry, Its Independence of the Movements of Contraction and Expansion in General Business;" and Abbott Payson Usher, Harvard University, "A Study of the Banks at Barcelona and Valencia."

The closing date for receiving applications for the coming year is February 1, 1930. Applications should be addressed to Walter R. Sharp, Social Science Research Council, 230 Park Avenue, New York City.

Robert F. Elder, recently appointed instructor in marketing at the Massachusetts Institute of Technology, was the winner of the first prize in the Alvan T. Simonds economic contest for 1928 on the subject "Reducing the Costs of Distribution."

The Alvan T. Simonds contest for 1929 is on the subject "The Federal Reserve System and the Control of Credit," and closes December 31, 1929. For rules write to the Contest Editor, Simonds Saw and Steel Company, 470 Main Street, Fitchburg, Massachusetts.

The usual prizes of the Hart Schaffner & Marx economic contest will be offered for 1930. Applications should be sent to J. Laurence Laughlin, University of Chicago.

German translations of five of Professor Seligman's books are to appear during the coming winter: *The Principles of Economics; The Economic Interpretation of History; The Economics of Instalment Selling; Double Taxation* and *Farm Relief.* A German translation of the *Shifting and Incidence of Taxation* appeared last year.

There will also be published during the winter Spanish and French translations of *The Economics of Instalment Selling,* a Czech translation of *The Principles of Economics* and a Japanese translation of *Farm Relief.* A French translation of *Double Taxation* appeared during the summer, and of *The Principles of Economics* last year.

The first volume of the *Encyclopaedia of the Social Sciences* is in press and should appear shortly.

The following notes concerning the Brookings Institution have been received:

Recent additions to the staff of the Institute of Economics are Frieda Baird, who is making a study of the federal intermediate credit system, and Knute Bjorka, who is assisting along statistical lines on several studies in the agricultural division.

Jurgen Kuczynski, a recent graduate of the Robert Brookings Graduate School of Economics and Government, is now editing *Finanzpolitische Korrespondenz.*

Isador Lubin of the staff of the Institute of Economics is spending several months in Europe making a study of the radio industry.

Leverett S. Lyon of the staff of the Institute of Economics has returned from Amsterdam where he acted as delegate for the United States government at the International Congress on Commercial Education.

Lewis L. Lorwin of the staff of the Institute of Economics attended the conference of the Institute of Pacific Relations in Kyoto.

Henry P. Seidermann and Taylor G. Addison of the staff of the Institute for Government Research, are in Santo Domingo supervising the establishment of the new system of financial administration recommended by the recent Dawes Commission.

John Kenneth Anderson, formerly with the Macmillan Company and Burt and Company, has joined the staff of the Brookings Institution, where he will have charge of the newly organized publications division.

Recent publications include: *The St. Lawrence Navigation and Power Pro-*

ject, by H. G. Moulton, Charles S. Morgan and Adah L. Lee; *The Tariff on Iron and Steel*, by Abraham Berglund and Philip G. Wright; *Unemployment Insurance in Germany*, by Mollie Ray Carroll; *Principles of Judicial Administration*, by W. F. Willoughby; *Registration of Voters in the United States*, by Joseph P. Harris of the University of Wisconsin; *The Government and Administration of the District of Columbia: Suggestions for Change*, by Lawrence F. Schmeckebier and W. F. Willoughby; *The Bureau of Prohibition*, by Lawrence F. Schmeckebier (service monograph); *The Coast Guard*, by Darrell H. Smith and Fred W. Powell (service monograph); and *Bureau of the Census*, by W. Stull Holt (service monograph).

Hand-to-Mouth Buying, by Leverett S. Lyon will appear shortly.

The following publications have appeared in pamphlet form: *Recent Growth of the Electric Light and Power Industry*, by Charles O. Hardy; *The Absorption of the Unemployed by American Industry*, by Isador Lubin; *First Mortgages in Urban Real Estate Finance*, by John H. Gray and George W. Terborgh.

Arrangements have recently been made for transferring to Columbia University Professor Seligman's library of economics which has been in process of formation for well-nigh fifty years, and which includes separate collections like those of Albert Bolles on American finance and of Francis Place on British labor, which were formed during the preceding fifty years. It now comprises over 40,000 items and constitutes the most valuable collection of the kind in existence. Very rich in the earliest economic literature of all European languages, it has recently been much strengthened in its medieval items, manuscript, and incunabula. The library will be separately housed and will be open—under suitable restrictions—to advanced students. A catalogue is in preparation.

Appointments and Resignations

Mr. Corliss E. Armstrong has recently been added to the staff of the division of research and statistics of the Federal Reserve Board.

Mr. R. S. Atwood has been promoted to associate professor of economic geography in the College of Commerce and Journalism of the University of Florida.

Mr. F. C. Auld has been added to the staff of the department of political science, economics, commerce and law at the University of Toronto as associate professor of law.

Robert R. Aurner has been promoted to associate professor of business administration at the University of Wisconsin.

Mr. Leonard Axe has been appointed instructor in business law at the University of Kansas.

Professor Ralph E. Badger resigned his position in the department of economics, Brown University, to become vice-president of the Union Trust Company, Detroit.

Mr. George E. Bates has been promoted to assistant professor of finance in the Harvard Graduate School of Business Administration.

Mr. Russell Bauder, instructor in economics at the University of Missouri, has been granted a year's leave of absence.

Mr. Royal D. M. Bauer had charge of the work in accounting at the University of Missouri during the summer session.

Mr. C. Crowell Bayard, formerly instructor at Dartmouth College, has been appointed assistant professor of economics at Oberlin College, replacing Professor Ben W. Lewis who is on leave of absence.

Mr. Willard C. Beatty, formerly of Wesleyan University, has been appointed assistant professor of economics at Brown University.

Dr. Theodore N. Beckman, associate professor of business organization at Ohio State University, is acting as special adviser to the Bureau of Census in the field of wholesaling.

Mr. Edward M. Bernstein of Harvard University is teaching economics in DePauw University for the first semester.

Mr. H. Berolzheimer, a graduate student in economics, is teaching part time in the department of economics at Yale University.

Mr. George Blattner, until recently manager of the service department of the Bank of Commerce, New York City, has become a member of the staff of the division of research and statistics of the Federal Reserve Board.

Mr. Daniel Borth, Jr., formerly with Haskins & Sells of Chicago, has been appointed assistant in the department of economics at the University of Illinois.

Mr. Chelcie C. Bosland, formerly of the University of Minnesota, has been appointed assistant professor of economics at Brown University.

Dr. Edison L. Bowers has been appointed acting chairman of the department of economics at Ohio State University in the absence of Professor A. B. Wolfe.

Dr. Roy E. Brown, formerly of the Iowa State Teachers College and later of Iowa University, is assistant professor of political science in the School of Commerce at the University of North Dakota.

Associate Professor Malcolm H. Bryan of the University of Georgia has been given a year's leave of absence, when he will study the tax problem in Georgia.

Dr. F. A. Buechel, senior agricultural economist at the Bureau of Agricultural Economics, Washington, D.C., has been made statistician and assistant director of the Bureau of Business Research at the University of Texas.

Dr. E. W. Burgess, formerly of the department of economics at the University of Illinois, is now with Field, Glore & Company, Chicago.

Dr. Susan S. Burr has been appointed assistant chief of the section of financial and economic research in the Treasury Department.

Professor Raymond T.Bye of the University of Pennsylvania is on leave in Los Angeles where he is conducting a research course in economic theory at the University of Southern California during the first semester of 1929-30.

Mr. C. C. Carpenter, formerly an assistant in economics at the University of Illinois, is teaching this year at Marshall College, Huntington, West Virginia.

Professor Homer Cherrington, until this year head of the department of economics at Ohio University, Athens, Ohio, has become professor of economics and finance in the College of Commerce at the University of Iowa.

Mr. Lawrence Clark, assistant professor of economics at the State College of Washington, has been granted a leave of absence for the academic year 1929-30 to do graduate work at Columbia University. He is also engaged upon a study of the history of the Federal Reserve Bank of New York City.

Mr. Paul B. Coffman has been promoted to assistant professor of accounting at the Harvard Graduate School of Business Administration.

Mr. Francis W. Coker has joined the staff at Yale University as professor of government on the Cowles Foundation.

Mr. Arthur H. Cole has been appointed administrative curator of the Baker Library at the Harvard Graduate School of Business Administration.

Mr. M. S. Cooley is instructor in the School of Commerce at the University of Georgia in the place of Professor Lloyd B. Raisty.

Mr. Morris A. Copeland, who has been with the division of research and statistics of the Federal Reserve Board, has returned to Cornell University as professor of economics.

Mr. F. R. Crocombe has been added to the staff of the department of political science, economics, commerce and law at the University of Toronto as lecturer in accounting.

Mr. W. F. Crowder has been appointed instructor in economics in the College of Commerce at the University of Iowa.

Mr. Donald H. Davenport, assistant professor of business statistics at Columbia University, is on leave of absence and has been appointed lecturer on business statistics at the Harvard Graduate School of Business Administration.

Dr. James C. Dooley has been promoted to an associate professorship in the School of Business Administration at the University of Texas.

Mr. Georges F. Doriot has been promoted to professor of industrial management at the Harvard Graduate School of Business Administration.

Mr. Edward Edelman has been appointed assistant in business history at the Harvard Graduate School of Business Administration.

Professor L. D. Edie of the School of Commerce and Administration, University of Chicago, spent the summer in Europe studying monetary and banking problems on a Guggenheim Fellowship. He has been granted leave of absence during the current academic year to be with the Investment Research Corporation of Detroit.

Dr. Paul A. Eke, assistant professor of farm economics at West Virginia University, has resigned to accept a position as head of the department of agricultural economics at the University of Idaho.

Associate Professor John G. Eldridge, who was granted a leave of absence from the College of Commerce and Journalism of the University of Florida to pursue graduate study at the University of Virginia and Columbia University, has been recalled to the University of Florida to teach government finance and principles of economics.

Miss Margaret Ellis has been added to the staff of the division of Research and Statistics of the Federal Reserve Board.

Mr. Harrison B. Fagan, who taught in the department of economics at the University of Illinois last year, is now acting as a representative of the Northwestern Life Insurance Company at Huntington, West Virginia.

Professor Fred R. Fairchild was elected president of the National Tax Association at the annual meeting in September.

Mr. Ralph H. Farmer, professor of finance at the University of Idaho and acting dean of the School of Business Administration for the year 1928-29, has been appointed dean of that school.

Assistant Professor Donald Ross Fellows of the department of economics of the University of Wisconsin, has been promoted to an associate professorship in business administration.

Professor Frank A. Fetter has resumed his work at Princeton University after a year's leave of absence during which time he served as an adviser to the administration of the Claremont Colleges in California.

Mr. Wendell W. Finley has been appointed instructor in accounting at the Harvard Graduate School of Business Administration.

Mr. Cecil E. Fraser has been promoted to associate professor of finance at the Harvard Graduate School of Business Administration.

Mr. Herbert F. Fraser has been appointed professor of economics at Swarthmore College.

Assistant Professor Domenico Gagliardo has been granted a year's leave of absence from the University of Kansas.

Miss Gladys S. Gatchell is a teaching fellow on the staff of the department of economics and sociology at Tufts College.

Professor Charles A. Glover resigned his assistant professorship in the department of economics at Brown University to enter the chief statistician's division of the American Telephone and Telegraph Company. He is also offering a course at Columbia University.

Mr. Charles I. Gragg has been appointed assistant professor of business at the Harvard Graduate School of Business Administration.

Mr. L. Wallis Graves has resigned his instructorship in the College of Business Administration at the University of Washington to become economic adviser for Blyth & Company, investment bankers, Seattle.

Mr. H. W. Gray has been promoted to professor of accounting in the College of Commerce and Journalism at the University of Florida.

Mr. Albert O. Greef is instructor in finance at the Harvard Graduate School of Business Administration.

Mr. H. M. Haas has been appointed instructor in the College of Business Administration at the University of Washington.

Mr. Roger S. Hamilton of the University of Pittsburgh is a teaching fellow in the department of economics and sociology at Tufts College.

Mr. Thomas R. Hamilton has resigned as assistant agricultural economist at the Bureau of Agricultural Economics, United States Department of Agriculture, to be assistant professor of statistics at the Texas Agricultural and Mechanical College.

Mr. R. W. Harbeson, during the past year acting head of the department of economics at St. Lawrence University, Canton, New York, has returned to Harvard as a University Fellow in economics.

Professor T. L. Harris has been made acting head of the department of economics, West Virginia University.

Miss Mildred L. Hartsough had been appointed associate in research at the Harvard Graduate School of Business Administration.

Mr. S. A. Hartzo has been granted a leave of absence from the University of North Dakota in order to complete his work for the doctorate at the University of Chicago.

Mr. Henry C. Hawley has been appointed instructor in marketing at the Harvard Graduate School of Business Administration.

Mr. Leo C. Haynes is instructor in accounting at the University of Texas and is also secretary of the Board of Regents.

Dr. Felix E. Held, after a year's leave of absence spent in European study, returned to his duties as secretary of the College of Commerce and Administration at Ohio State University.

Mr. William W. Hewett resigned his position as assistant professor of economics in the Wharton School of the University of Pennsylvania to accept the professorship of economics in the College of Liberal Arts at the University of Cincinnati.

Mr. Albert S. Howe, Jr., is instructor in business policy at the Harvard Graduate School of Business Administration.

Mr. Richard Howey is instructor in economics at the University of Kansas.

Professor M. H. Hunter has been appointed professor of economics at the University of Illinois. He will also be acting head of the department of economics this year during the leave of absence of Professor E. L. Bogart.

Mr. H. C. Hurst has been promoted to associate professor of economics and business law in the College of Commerce and Journalism at the University of Florida.

Mr. E. T. Ingle has been promoted to associate professor of journalism in the College of Commerce and Journalism at the University of Florida.

Mr. Daniel James is instructor in business law at the School of Commerce of the University of North Dakota.

Mr. C. C. Janzen teaches courses in economics and directs extension work at the State Teachers College, Milwaukee, Wisconsin.

Mr. E. C. Johnson has resigned from the University of Kentucky to accept a position in the department of farm management and agricultural economics at the University of Minnesota.

Adjunct Professor Greene F. Johnson has resigned from the University of Georgia to enter the employ of the Guaranty Trust Company.

Dr. Chester L. Jones, professor of economics and political science in the University of Wisconsin, has been appointed director of the School of Commerce.

Professor Russell Kilborne of the Amos Tuck School, Dartmouth College, has returned from Europe where he spent his sabbatical leave.

Professor Hugh B. Killough of the department of economics, Brown University, spent the summer of 1929 as a member of the research staff of the Barrington Associates, New York.

Dr. Lucy W. Killough has been appointed assistant professor of economics at Wellesley College. Dr. Killough was at one time associate statistician in the United States Treasury Department.

Dr. Susan M. Kingsbury of Bryn Mawr is on sabbatical leave during the year of 1929-30.

Mr. H. B. Kirshen, formerly instructor of economics at the College of the City of New York, has been appointed professor of economics at the University of Maine.

Mr. W. F. Kissick is instructor in economics at the University of Kansas.

Mr. Joseph G. Knapp has left the staff of the Institute of Economics to accept a position as associate agricultural economist at North Carolina State College.

Mr. W. A. Krick is conducting Professor M. H. Bryan's classes at the University of Georgia.

Associate Professor Leonard B. Krueger of Oberlin College, who is absent on leave for the year 1929-30, has taken up residence at the University of Wisconsin, where he is completing a manuscript dealing with the development of banking in Wisconsin.

Mr. Robert R. Kuczynski of the Council of the Institute of Economics is spending the winter in Europe.

Miss Henrietta M. Larson is an associate in research at the Harvard Graduate School of Business Administration.

Dr. Eleanor L. Lattimore is giving the seminaries and courses at Bryn Mawr usually offered by Dr. Susan M. Kingsbury.

Mr. Joseph S. Lawrence, formerly instructor in economics at Princeton, is a research fellow in the Brookings Institution at Washington.

Professor Chester F. Lay has been granted a year's leave of absence from the University of Texas to do graduate work in the University of Chicago.

Professor Ray V. Leffler is once more in charge of the courses in money and banking at Dartmouth College after teaching during the past year at the University of Michigan.

Mr. K. E. Leib has resigned his professorship in the College of Business Administration at the University of Washington to become professor of business management at the University of Iowa.

Mr. E. G. Lewis, formerly at the University of Texas, has been appointed an assistant in the department of economics at the University of Illinois.

Mr. Dean Long, formerly assistant professor of economics at DePauw University, has accepted a professorship in business administration in Evansville College.

Mr. Robert S. Lynd has been appointed permanent secretary of the Social Science Research Council.

Mr. John W. McBride has been appointed assistant in economics at Princeton University.

Mr. George W. McCulley, formerly of Edinburgh Junior College, has been appointed instructor in acounting at the University of Texas.

Dr. D. A. MacGibbon has resigned as head of the department of political economy at the University of Alberta to become a member of the Board of Grain Commissioners of Canada.

Mr. Glenn E. McLaughlin has resigned his appointment at Oberlin College replacing Professor Ben W. Lewis, to accept an appointment with the Bureau of Business Research at the University of Pittsburgh.

Dr. Theresa S. McMahon, who was on leave last year gathering material for her book on the *Social Economics of Consumption,* has returned to the College of Business Administration, University of Washington.

Mr. William H. McPherson, during the past year engaged in graduate study at the University of Chicago, has accepted an instructorship in economics at Dartmouth College.

Mr. August Maffry was instructor in economics during the summer at the University of Missouri.

Dr. Mable Magee, research assistant at the University of Chicago, has been appointed to an assistant professorship at Wells College.

Assistant Professor D. W. Malott has been granted leave of absence for the academic year 1929-30 from the Harvard Graduate School of Business Administration.

Mr. H. L. Marshall, former head of the department of business at Lingnan University, Canton, China, has become instructor in business administration at the University of Idaho.

Mr. Robert L. Masson, formerly at the University of Michigan, has been appointed associate professor of finance at the Harvard Graduate School of Business Administration.

Mr. Walter J. Matherly, dean of the College of Commerce and Journalism at the University of Florida, was employed by the United States Bureau of Education during the summer to assist with the land-grant college survey.

Dr. H. H. Maynard has been made chairman of the department of business organization in the College of Commerce and Administration at Ohio State University, succeeding Dean W. C. Weidler.

Mr. Elton Mayo has been promoted to professor of industrial research at the Harvard Graduate School of Business Administration.

Mr. Eliot G. Mears of the Stanford Graduate School of Business is resident professor during the first semester of the present academic year at the Institut Universitaire des Hautes Etudes Internationales, Geneva. His course and lecture work will deal with geographic influences in applied economics. Beginning early in 1930, in the capacity of visiting Carnegie professor, he will lecture at universities in Palestine, Syria, Turkey, Greece and Scotland.

Professor Richard S. Meriam of Amherst College has been appointed associate professor of business economics at the Harvard Graduate School of Business Administration.

Dr. Herbert A. Miller, professor of sociology at Ohio State University, is on leave for a year to be spent on research and teaching in the Orient.

Mr. John P. Mitchell, Jr., formerly assistant professor of business policy at the University of Michigan, has been appointed assistant professor of business economics at the Harvard Graduate School of Business Administration.

Associate Professor H. B. Myers resigned from the College of Commerce and Journalism at the University of Florida to become chief of the Division of Research and Statistics of the Illinois State Department of Labor.

Assistant Professor Robert Myers has resigned from the University of Chicago to accept a similar appointment at Grinnell College.

Mr. Stewart K. Nakano of Stanford University is a teaching fellow in the department of economics and sociology at Tufts College.

Mr. William Neiswanger, formerly instructor in economics at the University of Wisconsin, has accepted an assistant professorship in economics at DePauw University.

Mr. Arthur E. Nilsson, formerly instructor in economics at Yale, is associate professor of economics at Oberlin College for the year, replacing Professor L. B. Krueger who is on leave of absence.

Mr. William C. Ockey, who was last year instructor at the University of Texas, has been added to the School of Business at the University of Utah as assistant professor of business majoring in the field of insurance and economics.

Miss Elinor Pancoast has been promoted to associate professor of economics at Goucher College.

Mr. Millard Peck resigned from his position as senior agricultural economist in the Division of Land Economics, Bureau of Agricultural Economics, United States Department of Agriculture, to become professor of agricultural economics at Iowa State College.

Professor Charles E. Persons, for the past year lecturer in the Harvard University department of economics, has been appointed expert on the economics of unemployment in the federal Bureau of the Census.

Mr. L. L. Peterson has joined the staff of the School of Business Administration at the University of Arkansas.

Mr. Josiah T. Phinney, formerly of Williams College, has been appointed instructor in economics at Brown University.

Mr. Ralph Pickett is head of the department of commerce in the Kansas State Teachers College at Emporia.

Professor C. Terence Pihlblad of Wittenberg College taught economics during the summer session at the University of Missouri.

Mr. Sterling Popple has been appointed assistant in business history at the Harvard Graduate School of Business Administration.

Mr. Kenneth W. Porter is assistant in research at the Harvard Graduate School of Business Administration.

Mr. Lloyd B. Raisty, adjunct professor of commerce at the University of Georgia, is visiting instructor in accounting at the University of Texas for the year 1929-30.

Mr. J. R. Ramser, formerly with Hoagland, Allum Company, New York, and the Bureau of Business Research at the University of Illinois, has been appointed an assistant in the department of economics at the University of Illinois.

Professor Carl A. Rehm has been granted a year's leave of absence from the University of Texas.

Mr. Henry Rehn, accountant on the staff of the Bureau of Business Research at the University of Texas, is on leave of absence.

Dr. W. J. Reilly, marketing research specialist in the Bureau of Business Research at the University of Texas, has resigned to become director of research for the Erickson Company, New York.

Mr. H. A. Richardson, formerly instructor in marketing at the University of Kansas, has accepted a position as assistant professor of marketing at

the North Carolina State College of Agriculture and Engineering. In addition to his teaching he will have charge of the business placement bureau at that institution.

Mr. Warren A. Roberts of Harvard University is instructor in economics at the University of Idaho.

Mr. A. G. Ronhovde is instructor in political science at the School of Commerce, University of North Dakota.

Dr. C. Rufus Rorem, associate professor of accounting at the University of Chicago, has resigned to accept a three-year appointment on the research staff of the Committee on the Cost of Medical Care at Washington, D.C. This committee is under the chairmanship of Dr. Ray Lyman Wilbur and is organized to study the economic aspects of the care and prevention of illness. Mr. Rorem will assist the committee in the study of business methods of hospitals and other medical institutions.

Mr. R. M. Rutledge of Utah Agricultural College has been appointed lecturer in the department of economics in the University of California at Los Angeles.

Mr. Charles H. Sandage has resigned his position as assistant professor of economics at the University of Kansas and has accepted a similar position at Miami University, Oxford, Ohio.

Mr. Raymond J. Saulnier of Middlebury College is a teaching fellow in the department of economics and sociology at Tufts College.

Mr. P. C. Scaglione is instructor in office management and economic history at the College of Commerce and Journalism in the University of Florida.

Mr. Carl N. Schmalz, formerly assistant professor of retail store management and assistant director of the Bureau of Business Research at the University of Michigan, is assistant professor of marketing and assistant director of the Bureau of Business Research at the Harvard Graduate School of Business Administration.

Mr. Lawrence Schmeckebier of the staff of the Institute for Government Research has been appointed supervisor of the Census of Indian Reservations for the Fifteenth Decennial Census, 1930.

Mr. Albert J. Schwieger is instructor in economics at the School of Commerce in the University of North Dakota.

Professor William A. Scott has resigned the directorship of the School of Commerce at the University of Wisconsin in order to devote all of his time to instruction and research.

Mr. Earnest R. Shaw, teaching assistant at the University of Chicago, has resigned to accept an appointment with the Investment Research Corporation of Detroit.

Mr. H. F. R. Shaw has been advanced to an assistant professorship in economics at Dartmouth College.

Dr. William R. Sherman, professor of economics at DePauw University, is teaching economics at Carlton College the first semester of this year.

Mr. H. G. Shields has been appointed assistant dean of the School of Commerce and Administration at the University of Chicago.

Professor Carroll D. Simmons has been promoted to a full professorship at the School of Business Administration, University of Texas.

Mr. Verne Simons of the School of Commerce and Administration at the University of Chicago has been appointed to an assistant professorship at Rice Institute.

Professor Sumner H. Slichter of Cornell University has joined the Institute of Economics on a year's leave of absence to complete a study of the influence of trade unions on production.

Mr. Walter Buckingham Smith, formerly at Wellesley College, has been appointed Orrin Sage professor of economics at Williams College.

Mr. Everett G. Smith, formerly of R. L. Polk & Company, Chicago, has been appointed visiting adjunct professor of marketing at the University of Texas.

Mr. Joseph L. Snider has been promoted to associate professor of business statistics at the Harvard Graduate School of Business Administration.

Mr. John V. Spielman has been appointed acting assistant professor of economics and commerce at the University of Missouri to occupy the place made vacant by Mr. Russell Bauder's leave of absence.

Mr. Royal S. Steiner has been appointed professor of economics at Knox College.

Mr. Andrew Stevenson, Jr., is assistant professor of transportation at Kalamazoo College.

Mr. C. C. Stillman, formerly executive secretary of the Community Chest of Grand Rapids, Michigan, has been appointed professor of sociology at Ohio State University.

Mr. Theodore C. Streibert has been appointed assistant dean at the Harvard Graduate School of Business Administration.

Mr. M. H. Sublette, formerly with the Bureau of Business Research at the University of Illinois, has been appointed an assistant in the department of economics at the University of Illinois.

Mr. James Summers has been appointed to fill the vacancy at the University of Georgia caused by the resignation of Adjunct Professor Greene F. Johnson.

Mr. Glenn W. Sutton, formerly instructor at the University of Idaho, has been appointed associate research professor of economics and has charge of the Bureau of Business Research in the School of Commerce at the University of Georgia.

Assistant Professor J. H. Taggart has charge of the work of the business placement bureau at the University of Kansas.

Mr. Carl F. Taeusch has been promoted to associate professor of business ethics at the Harvard Graduate School of Business Administration.

Mr. Frank Tannenbaum has left the staff of the Institute of Economics to complete his study of the life of Thomas Mott Osborne under a grant from the Social Science Research Council.

Mr. Gilbert Tapley, professor of statistics at the Tuck School, Dartmouth College, has resigned to accept a position in the research department of the United Fruit Company, Boston.

Professor Charles S. Tippetts has resigned his position at the College of Business Administration in the University of Washington and has been appointed professor of economics in the School of Business Administration at the University of Buffalo.

Mr. F. W. Tuttle has been appointed assistant professor of economics at Washington and Jefferson College.

Mr. H. E. Underhill is filling the place of Professor Gagliardo at the University of Kansas during the latter's leave of absence.

Professor E. H. Vickers has resigned as head of the department of economics at West Virginia University.

Mr. Ross Graham Walker has been appointed Dickinson Fellow at the Harvard Graduate School of Business Administration.

Mr. Herschel Walling is substituting for Mr. Henry Rehn as accountant on the staff of the Bureau of Business Research at the University of Texas.

Mr. Clark Warburton has accepted a position as associate professor of economics at Emory University.

Mr. F. C. Ward has been made instructor in accounting at the College of Commerce and Journalism in the University of Florida.

Mr. B. E. Warden, formerly instructor in business law at the University of Kansas, has accepted a position as assistant professor of business law at the Carnegie Institute of Technology.

Mr. Frank D. Washburn has been appointed lecturer on real estate management at the Harvard Graduate School of Business Administration.

Miss Emily B. Weber resigned last spring as instructor at Wellesley College and now has a research position in the New York State Department of Labor.

Acting Dean Walter C. Weidler of the College of Commerce and Administration, Ohio State University, has been appointed to the deanship.

Mr. John P. Wernette, a tutor on the economic staff at Harvard University, was in Colombia during the last year serving as adviser both to the government of Bogota and to the national government.

Mr. William W. Werntz, a student in the Yale Law School, has been appointed instructor in accounting at Yale University.

Mr. B. O. Wheeler has been appointed instructor in the College of Business Administration, University of Washington.

Mr. John A. White has been appointed instructor in accounting at the University of Texas.

Mr. Roswell H. Whitman has been added to the staff in economics at Williams College as instructor.

Assistant Professor Claire Wilcox has been promoted to an associate professorship at Swarthmore College.

Mr. Sidney Wilcox, director of the Division of Statistics and Research of the Illinois Industrial Commission, has resigned to accept a research appointment at the University of Pittsburgh.

Mr. Edwin E. Wilson has been appointed assistant professor of economics and sociology at Oregon State Agricultural College.

Mr. R. S. Winslow, who has been teaching in the department of economics at the University of Illinois, is now with the department of economics at the University of North Carolina.

Associate Professor Theodore O. Yntema of the University of Chicago has been granted leave of absence for the current academic year to teach in the School of Business at Leland Stanford Junior University.

Mr. John Parke Young is on leave of absence during the present year from Occidental College and is serving as a member of the Commission of Financial Experts, Ministry of Finance, Shanghai, of which Professor Kemmerer is chairman.

Accounting, [illegible]

Capital and [illegible] Organization

Labor and Labor Organizations

Money, Prices, Credit, and Banking

Public Finance, Taxation, and Tariff

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